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6	The Microbial Safety of Fresh Produce
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Watsonville

Dr. Abraham Tenzer

3:57 p.m.

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Closure

UNITED STATES 1 UNITED STATES DEPARTMENT OF FOOD AND DRUG 2 AGRICULTURE ADMINISTRATION 3 TOWN MEETING 4 --000--5 I believe this MR. NELSON: Good morning. 6 is the fifth grass-roots meeting held across the 7 country, and I do introductions. 8 I'm Ray Nelson. I'll be your moderator 9 today, and starting to my right is Joyce Saltsman 10 from FDA. She is one of the writers of the document. 11 Carl Winter from the California Extension 12 Service, Tom Gardine, Director of Imports from FDA in 13 Washington. He will be doing the presentations 14 today. 15 Roger Lowell is the District Director of 16 Seattle District of FDA, Acting Director of the 17 Pacific Region at the time. 18 Dr. Richard Breitmeyer from the Department 19 of FDA, and Dr. Vanderveen from Center for Food 20 Safety, FDA. 21 So, welcome today. A little bit of 22 housekeeping to start out with. Restrooms are right 2.3 down the hall. So you can't miss them. There is a 24 sign out there. 25 At lunchtime, most of the restaurants we

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can find are on Main Street. There is Wendy's,
McDonald's, Burger King -- across the street is the
Dakota Jake. So there's number of restaurants out
there so we try to keep that going.

If anyone has not received their packets yet, they are out on the table. I hope everyone has. If not, please go out and get it, and there's coffee out there. So any time you want coffee, you are free to go and get it.

A little history of what's going on. You know, October 2nd, 1997, President Clinton had the announcement about the initiative to, "Ensure safety of imported foods and domestic fruits and vegetables."

That's why you are all here. He requested that the USDA and FDA develop a guidance document for good agricultural practices and good manufacturing practices, and in that request, it was to have grass-roots meetings across the country, and like I said, this is the fifth one.

The sixth one is going to be held in Portland, Oregon, and a good share of the people here will be up there.

A lot of you probably recognize me from what we've done here in Salinas Valley. In the last two years, we worked with Western Growers, and the

industry here, developing a Voluntary Food Safety Guideline, this document here.

And we have a rollout with this document this last fall, and, basically, it talks about good agricultural practices and good manufacturing practices for the salad industry and fresh-cut industry. So there is nothing new there.

We also worked with the Strawberry

Commission here in the State, in Watsonville, about
a quality insurance program for -- ever since the

Cyclospora issue happened here two years ago, and
that is another document that is in process.

In the last document is a Quality Assurance Plan with the apple growers in El Dorado County, called, "Apple Hill Quality Assurance Plan," which is good agricultural practices and good manufacturing practices.

In all these documents, we give credit to the industry, to the farmers, to different groups that have worked very hard to develop this.

These documents, which you are looking at, the good agricultural practices document, you may see a lot of familiarity with the two of them because we have sent all this stuff back east, and the group has looked at these things. So a lot of the praise goes to the California industry here for developing these

kinds of documents.

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In President Clinton's initiative, he directs the Secretary of Agriculture and Secretary of Health and Human Services to work together developing this good agriculture practices and good manufacturing practices regarding microbiological hazards and food safety and water quality, sanitation hygiene transportation, manure and municipal sewage sludge.

Those topics have been discussed everywhere along in our meetings, and it's a pretty common thing that we're discussing today. This is a very informal meeting. Everyone will have a chance to talk.

You can ask any questions you want, and you can put your comments -- if you have a comment, please go to the microphone and state your name. We have a recorder here that will be taking everything down. It will go into the record.

If you have written documents that you would like to have put in today, please give them in to us. We will have them put into the document. So it will be transcribed into the official document that leaves here today.

A few welcoming remarks now. Roger Lowell will give the first welcoming remark.

MR. LOWELL: Thank you, Ray. I'm a

stand-in for Pat Zibro, whom, many of you probably know, is the District Director in San Francisco District. I do come out of Seattle District.

I am quite familiar with California operations. I spent five years working in Los Angeles. I also happen to be Chair of the agency's Field Food Committee, which is the interchange between the FDA and growers for safety. So I've also been very involved. I have seen the products of your efforts down here between Ray, the State and the industry and industry associations here.

I've been very impressed with what you've done out here. You are leading once again. I am from Washington, so I'm not supposed to admit that California leads, but California is leading, especially in the produce area.

Seattle District of Food and Drug was quite involved in the apple issues because most of the samples that came out of California were run in the Seattle District Laboratory of Food and Drugs, and so we were pretty involved in that unfortunate incident also.

I would like to emphasize a few points about the President's initiative. First of all, it is collaborative, as Ray mentioned. This is a collaborative operation. It's not the Feds coming

down and dictating. It's the Feds coming out and looking for input.

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It's also done with the Department of Agriculture and with the State organizations.

Town meetings, which this is one of, are rooted in the history of our country. Their purpose is to get feedback to reach a cooperative effort and to get a common understanding and a commonly-reached goal that we can move forward with, and we're also asking, as Ray indicated, for your candid input into this.

So please don't feel shy, after some of the presentations are made and it's open for more general comment, to get the comments in.

It is being recorded and your comments, each one of them, are assessed. I have had a lot of experience with the development of seafood regulations, and there was a lot of this kind of input before those regulations got developed, but I think I have to emphasize, in this case, the agency is not looking to develop regulations.

The agency is looking to develop guidelines, so please keep that in mind. I know there's been some rumors around that the agency is looking to develop more rules and the Feds are coming down to tell us how to do our job, and that simply is

not the case.

A couple of things about FDA's responsibility. We are responsible to see that the foods on the American tables are safe and wholesome, and part of our role is to prevent problems.

When I first came to the agency, more years ago I than I would hate to count right now, our only mission that I understood was to protect the public health, and we operated out of that mode of protecting the public health, and that's more of our enforcement mode.

About four or five years ago, a second word came into our mission statement, and that was, "Promote the public health." "Protect" did not drop out, but "promote" got added in, and I see this as a part of our role of promoting the public health is getting to the root of the problems, working with people to try to figure out how to solve those problems and then get them solved.

The task at hand is two-fold: First, through Tom, we plan to review some of the major features of the President's initiative on fresh produce, and we'll have that background.

Second, as I have said, again this is a draft and we need your information into this draft. We need your input into it and we are looking for

that input.

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What I would also ask is that in your handout, during the meeting as Tom is talking and going through it, at lunch you give that a good critical review and after that review that you come in with your comments that you want to give to us.

That is all I have. Thank you for allowing me to come down, and thank you all for taking the time out of your busy schedules to come to the meeting.

Ray?

MR. NELSON: Thank you, Roger. The next introduction will be Dr. Vanderveen, Acting Director for Center for Food and Safety, FDA.

MR. VANDERVEEN: Thank you very much.

Well, welcome. We also have felt welcomed in coming here. Everyone has been very helpful in trying to arrange this meeting, and we hope that today you will feel free and capable of getting up at any time and telling us your thoughts, or asking the question that you want asked.

I'm here today to welcome you on behalf of the Center for Food Safety and Applied Nutrition of the FDA, and our Federal partners in this presidential initiative, which includes, as you will learn throughout the day today, several parts of the

U.S. Department of Agriculture, including the Cooperative Extension, that research arm of USDA, who were there.

Also the Center for Disease Control is helping us in this effort and the Environmental Protection Agency will also play some role as we proceed in this general area.

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We're -- we want to express our gratitude that you are willing to come out here today. We recognize that you have busy schedules. This is the time of year when you are still harvesting and you -- some of you did travel considerable distance to get here.

Americans have been encouraged to consume more fresh fruits and vegetables because we recognize today, from research that has been done by the National Institute of Health, and others, that fresh fruits and vegetables are helpful in preventing long-term degenerative diseases, and we are seeing positive responses to that.

People are eating more fresh fruits and vegetables, and there is some progress in lowering incidences of these disease.

However, we are concerned about trading one risk for another risk, and we recognize that your industry has done a fantastic job. We have one of

the safest food supplies in the world and we want to keep it that way, but of late there's been some problems that we have been noticing.

It may be because we're looking better but it also may be because there are emerging pathogens that are giving us more problems.

So today we want to tell you about an initiative that -- and we're planning to do that, about the President's initiative in this general area, and we are here -- we also wanted to share with you the progress we're making, in terms of the guidance that we're preparing, and -- but our main purpose is to gain from you your advice, your constructive criticism, and the benefit from your knowledge. You are the folks who are busy doing the work and know what is there.

I also want to acknowledge the fact that, what you see today, as was already mentioned, is based in large part on what your trade associations and other industry activities have already done, and that's put together some very fine guidance in this general area, and we're trying to package it so it can be used nationwide, and perhaps internationally, to make sure that we're doing the right thing, in terms of producing guidance.

The educational arms of your trade

association have shared with us, from time to time, these guidances and asked for our input and we have tried to be helpful in that regard, but quite clearly, what you see today is what we've gleaned, to a significant degree, from what you have already done.

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Now there is more about this new initiative that I would like to emphasize. It's about guidance, not regulation. You have already heard that. I want to tell you that the agency -- the Food and Drug Administration, and also other government agencies, are recognizing that we accomplish more through a cooperative effort, and in that regard, it's about a new paradigm, where we're trying to -- where the government will place more emphasis on helping to prevent food safety problems by establishing, in this case, good agricultural practices, guidelines and good manufacturing guidelines, and we want to approach it from that perspective.

We want to work with you to improve food safety. We want to establish a continuing dialogue. At the end, we're going to go through several iterations of this type of thing, and we recognize that it's a dynamic situation; that, as new science and new technology comes along, we wanted to be able to modify what we have, and the only way we're going

to be able to do that is by industry and government working together to do that.

We want to plan -- help plan, establish sound production, processing, storage, transportation, and all this is part of it, and also retail and consumer practices.

Now, I would caution, of course, the document that you are looking at today focuses on agriculture and production, as opposed to all the other parts of that chain, but we are going to be tackling all of that as time goes on, especially the consumer end of it.

One final point, although this is guidance being developed for the domestic industry and for the consumers, it is absolutely essential for us to have such guidance to be able to demand that our trading partners will meet the same standard for imports.

We want to work with our foreign partners, if you will, our trading partners, and make sure that we have equivalent systems, and as you will hear in a little bit, there is a move on foot.

The President has asked for and the Congress is responding, at least in terms of an initial bill, to give us the authority to work with other governments, to make sure that they do as good a job as you are doing, in terms of producing safe

produce.

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As you know, we can only impose such standards on our trading partners if there is equivalency, and if -- and that's what the world trade agreement, and that's what the NAFTA has at the root of it, that equivalency is the important thing.

Again, I want to thank you for coming. We appreciate your input and involvement in this process, and we look forward to continuing it after today, as well.

Thank you.

MR. NELSON: Thank you, Dr. Vanderveen.

Our next speaker will be Dr. Breitmeyer from California Department of Food and Agriculture.

MR. BREITMEYER: Thank you, Ray. On behalf of Secretary Veneman, it is really a pleasure to add our welcome and share our perspective from the Department of Food and Agriculture on these important food and safety issues.

We are very pleased that FDA has come to California to receive input on this initiative. It's really appropriate, since California produces over 50 percent of the fresh fruit and vegetables in this nation.

We are very proud that California has been a leader in developing food safety guidelines and

quality insurance programs for a wide variety of plant and animal commodities, including fresh fruits and vegetables.

Developing these successful partnerships has been possible through the efforts of many industry leaders, several of which you are going to hear from today. Working cooperatively with all levels of government, locally at the State level, and nationally.

Also working with university experts who have stepped forward to assist in the educational processes, the training programs and assisting to look at the research needs in many of these areas, cooperation between agriculture and public health agencies in California has just been excellent.

Solutions and programs have been developed together and we feel very strongly that that should be a model that's looked at nationally.

We encourage the FDA to recognize, and thank them for already recognizing, the excellent work that has been done in developing guidelines and programs that have been developed cooperatively between industry leaders, university researchers and all the government agencies here in California.

It's important to clearly recognize that California already has some of the most stringent

laws, regulations and standards already in place to protect public health and ensure food safety, as well as worker safety.

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We encourage FDA to spend considerable time in the fields, in the processing plants with industry experts and really gain a firsthand appreciation of the standards already in place and ensure that the guidelines reflect modern agricultural practices.

The folks crafting this document must understand firsthand what's really going on out there. That is absolutely essential.

We would like to caution FDA from targeting specific guidelines for individual commodities which may inadvertently imply to consumers and unfounded risk for certain specified fruits and vegetables.

We do encourage FDA to promote Food Safety Guidelines applicable to all fruit and vegetable commodities, which then happens to affect all produce at each step in the food chain, from the field all the way to consumption.

For those issues that lack complete scientific understanding, we ask the Federal assistance in supporting and developing research which is needed to prevent or eliminate potential microbial pathogens.

We look forward to strengthening even more

our partnership among industry, academia and all levels of government here in California, as we all work together to provide our consumers with the safest possible food supply. Thank you very much.

MR. NELSON: Thank you, Mr. Breitmeyer.

Our next speaker will be Carl Winters from UC Davis

Extension.

MR. WINTER: Thank you, Ray. Good morning. As the designee for the University of California Cooperative Extension Services, I'm wearing a pretty big hat. I am not an administrator in the program but rather a practicing scientist with an interest in the food safety area.

Many of you are probably very familiar with how Cooperative Extension works in California, and I think, for issues such as this one, microbial food safety, agricultural practices, this is an area where I think the University of California can play a vital role, in many cases, developing the work and getting -- developing the research data, getting it out to the various people so we can make the best possible decision out there.

We've got a very large system. We have three different university campuses, Davis, Riverside and Berkeley, which have specialists in various departments which represent Cooperative Extension.

We also have many field stations throughout the State and, in addition, in almost all of your 58 counties, we have local offices of experts who can deal with a variety of agricultural and consumer issues.

We are very well represented. I think our major structure is one that allows us to get out and work with a variety of different types of groups, to try to get the flow of information, whether it comes from what the government is doing, the industry is going, whether there are consumer concerns, and, hopefully, if we're doing our job right, we have a nice seamless flow system in which the appropriate research can be done, the appropriate education, campaigns, training, et cetera, can be worked out.

Certainly in the area of microbiological food safety, this is a critical need and something the University of California is taking very seriously.

I am a Director of a program on campus called the Food Safe Program, which is primarily an informational arm of the university.

Our goal is to try to get food safety information in appropriate format for a variety of different audiences, and in doing this, we work with people within the university, and certainly industry,

consumer groups, government groups, to try to put together the right groups to deal with issues.

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We may have formal conferences in some cases, and, in other cases, we may have just newsletters or particular meetings.

One thing that we have just recently gotten off the ground is a Webb site. It's "foodsafe.ucdavis.edu."

This is all a bright-enough group. I don't have to go with "HTTP://", and all that sort of thing. Well, I had to get that in. Anyway.

We have just gotten that site off the ground. We have a few bugs still in it, but we certainly welcome your feedback in it.

We have a data base of food safety information and one of the things I think will be very valuable for many of you, and hopefully for the government agencies as well, is a directory of various food safety experts within the University of California system.

We have identified about 120 different people within the University of California system involved in some aspects of food safety.

So, you should be able to do some searching by subject matter and be able to identify the experts, both at the campus level, as well as in many

cases, at the local level, that can provide the appropriate information, or might be appropriate to get involved in your food safety programs.

We're very well represented, even at this meeting. I'd like to embarrass a couple of my colleagues by asking them to stand up.

In the back we have Dr. Linda Harris, who is a food safety microbiologist with Cooperative Extension Service in the Department of Food, Science and Technology. We also have Dr. Trevor Suslo, who is with the Vegetable Crops Department in Extension, who deals with a lot of post-harvest and production issues, transportation. He been very active in a lot of the food safety issues.

Additionally, at the local level, we have Janice Harwood, from Monterey County Cooperative Extension, who is our Consumer and Family Science Advisor.

So I hope, during the course of today's discussion, that you will have a chance to hear or talk to them and relay some of your concerns to them as well.

I really don't have too much more to say, other than that the food safety issue is certainly a major priority of the University of California Cooperative Extension System.

We certainly hope to be a partner with all of you, with government, with industry, with consumer organizations, to try to find the best solutions to some very serious and important problems.

So I look forward to working with you all in developing a lot of these good agricultural practices, and I'm very interested in the rest of the program.

Thank you.

MR. NELSON: Thank you, Carl. If everybody up here would like to sit down in the audience right now, the next speaker will be Tom Gardine, and they won't be blocking the screen.

MR. GARDINE: I will give everybody an opportunity to get settled. Before I begin, how many of you have had an opportunity yet to read, in any great detail, the guidance document that you would have picked up this morning?

Well, it's generally about half. My goal today is going to be to talk a little bit about the President's initiative, and why he is doing it, and then to go through the guidance document, to outline what we hope are some of its major components.

I want to stress, as I do at each meeting, please do not listen to my presentation, make a decision on that and walk out.

The devil in any guidance document like this, in terms of its practicality, is doability. It's financial cost to growers is in the details.

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In putting my slide presentation together, I didn't -- the purpose of this meeting is not for you to listen to me. My only attempt is to outline the document and perhaps get discussion going. We are here to listen to you. We are here to get comments on this guidance document, to help us make it better.

So I will be trying to bring out points that, at other meetings, we had some discussion about, hoping to solicit comments from you, but, please, do not make a determination about the viability of the document based on what I say today. The develop is in the details.

Read it, and you do have an opportunity, as I will discuss later, to comment more fully on the document in writing.

Okay. Thank you.

First, a little bit about what started this. As you heard, on October 2nd, of this year, President Clinton announced his "Initiative to Ensure the Safety of Imported and Domestic Fruits and Vegetables."

This is an add-on component to a Food

Safety Initiative that he already started, called, I believe, "Food Safety from Farm to Table."

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We realize that food safety is not something, in terms of fresh fruits and vegetables, is not something that a grower could do alone. It has a retail component -- thank you -- the President's initiative, overall initiative has a retail and consumer education component that we realize is equally important.

Now, why did the President feel he had to come out and do something concerning an "Initiative To Ensure The Safety Of Imported Fresh Fruits And Vegetables"?

When announcing this initiative, he stated fresh fruits and vegetables in this country are the safest in the world, and they are, and we want to keep them that way. But there are things that are happening that are bringing concerns with fresh fruits and vegetables to the fore that we must address, because they are affecting consumer confidence.

Consumer confidence in fresh fruits and vegetables are very important because, as John Vanderveen stated, your government is telling its citizens that they should be eating more and more fresh fruits and vegetables.

We dropped by at the local Agricultural Commissioner's office yesterday to pay a courtesy call, and I picked up this statement, not to give them any particular publicity, but -- from the California Strawberry Commission.

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It's called, "Find the Easy Way to Five-A-Day," and what it states, and it's exactly what I'm hearing today. "Leading health association research links increased consumption of fruits and vegetables to reduced risks of heart disease and various cancers. To support these findings, the National Cancer Institute encourages Americans to consume at least five servings of fruits and vegetables every day."

So your government is actively encouraging its citizens to eat more fruit and vegetables. We are concerned when illnesses are associated with these. We are also concerned with the effect that these illnesses may have in consumer confidence with the product.

Even though we recognize that fresh fruits and vegetables in this country are damn safe, we want to see what we can do together, working with industry, academia and the States, to keep them safe.

The concern started with illnesses that you are all aware of. We had Salmonella associated with

fresh fruits and vegetables.

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We have Cyclospora associated with Guatemalan raspberries, E. coli 0157:H7, I believe, associated with lettuce. Salmonella also associated with lettuce.

That's a short list, and by no means is this an endemic out-break or isolated incidences that are affecting people.

These diseases are terrible. You don't want to be associated with them, but it is something we have to respond to, and another reason is that some of these organisms, Cyclospora, E. coli are emerging.

The analytical methodology to enable us to test for them really isn't there. So our normal defense mechanism of testing product, certainly in terms of imports at the border, really don't work, because frequently the analytical methodology either doesn't exist or is, frankly, damn poor.

Research will fix that. By the time -but, unfortunately, frequently by the time research
finds a way to test the one organism, there are new
emerging pathogens that must be dealt with, and the
research is very difficult because, in each different
food matrix, there may be different problems in
finding the organism.

For example, Hepatitis in strawberries, should you look for that, there is a problem because there is something in the strawberry, an enzyme or whatever, that inhibits the growth of the organism when you try to find it.

So the research to test it analytically is difficult. The research to test it analytically may not be the way to go because much of the contamination would be very spotty. It wouldn't be spread throughout a production lot.

So what the President is saying, and we at USDA in the States, and hopefully working through your trade organizations, because we do realize that the U.S. Industry was way ahead of the curve on this -- the U.S. Industry, through national industry groups and local trade associations, we're developing guidance documents to address what we'll be talking about today, a very narrowly-focused problem, microbiological hazards associated with fresh produce.

The industry was way ahead of us on this, addressing it before we did, and making sure that guidance was out there to assist growers to minimize the risk of this problem.

The President's initiative has two major components.

First, legislative.

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You had heard that a piece of legislation was submitted to Congress. It has sponsors in the House of Representatives. It does not yet have a sponsor in the Senate.

What the legislation says is essentially addressing imports, and what it says is that, when a foreign country's system -- when either their governmental rules, regulations and infrastructure, or industry infrastructure, does not match the level of protection we want in this country, we can -- should the Secretary of Health and Human Services make such a determination, not permit entry of that product.

The legislation, as crafted now, would also permit us to deny entry of a product, should FDA be denied an inspection in a foreign country when we believe there is a need, i.e., response to an illness out-break.

It also requires us to develop a plan to which pen has not yet been put to paper, to determine how to implement this legislation.

I must caution you, the legislation was submitted in the house. It does not yet have a sponsor in the Senate.

That is probably because it was submitted

only a day or two before Congress went out of session, but we have no idea whether the legislation will look as it does now when it is finally passed, or if indeed it will pass. So I'm sure your industry groups will keep you well advised on it.

The President's initiative also has an administrative component. We will be talking about the guidance, the good agricultural practice guidance, a great deal, in a moment.

It also will have a budget request. If we are going to initiate this, there is research that needs to be done to fill GAPs, either by the Federal Government, the State, academia, or, you know, research industries, industry itself. We do not know.

The budget would involve our fiscal 1999 budget. Requests are in. We don't have any idea how much we're going to get, so I'm not going to talk a great deal about the budget, and President Clinton asked USDA, FDA, and other involved agencies, when we talk about water, we need EPA involvement.

When we talk about worker health sanitation, we need OSHA at the table, and we are to report to the President in 90 days, not what we are going to do, but an outline of what we think -- of the steps we think we have to go through to implement

his initiative.

The administrative portion of the President's initiative states that FDA, in cooperation with various components of USDA, other Federal agencies, will be working and are working with States of -- both individually and through the National Association of States Department of Agriculture, to issue within one year guidance for good agricultural practices.

Bear in mind, this is guidance, and guidance for good manufacturing practices, variously known as GAPs and GMPs.

FDA and USDA would then, after this guidance is developed, coordinate assistance and educational activities to domestic and foreign industry.

You can't just put guidance down. You have to work with growers, domestically, and our suppliers in foreign countries, to make this work.

As many people have stated, and I will state many times, we are developing guidance, not regulation. It does not impose mandatory requirements on industry, either domestic or foreign. It cannot be guidance in the U.S. and mandatory overseas.

It is guidance everywhere, and its goal is

to help firms, growers and producers identify appropriate practices to minimize microbial hazards.

Once again, I want to stress the document we are going to be talking about today is very limited in scope. As growers, you are aware that there are many things that you have to be aware of to produce safe produce.

The only thing that this guidance document attempts to address are steps you could take to minimize microbial hazards associated with fresh produce.

We don't talk about pesticides. We don't talk about the myriad of other things that could possibly go wrong, but we are talking about, simply, microbial hazards in fresh produce, and I want to stress, we talk about minimizing microbial hazards.

No one at FDA, certainly not USDA, certainly not your State representatives, and certainly not you, believe this is a sterile world. You are growing these crops on the earth, under the sky.

You are not expected to produce a sterile product, but we are trying to work with you to identify doable things that could help minimize microbial load of pathogens when actions are within the control of the grower.

The proposed broad-scope good agricultural practice guidance document is planned for issuance in 1998, with a very public process, and I'll talk about this a bit more.

2.4

But just to let you know what has happened already, we had a public meeting on February 17th of this year, where we first talked about these concepts.

Last week and this week, we're having a series of regional grass-roots meetings, attempting once again to solicit the input, comments, suggestions, outrage, if necessary, of regional growers.

We had an international meeting in Washington this past Monday because, quite frankly, when you talk about minimizing microbial risk in fresh produce, you have to deal with our foreign suppliers, as you are well aware, because of competition, they are becoming more and more an important source of fresh fruits and vegetables in this country.

I believe the President in his announcement mentioned something like between 35-to-40 percent of the fresh fruits consumed in the U.S. are imported, and I think it's approximately 15 percent of the fresh vegetables.

But more about that in a moment.

This is a new slide and I put the new slide in, and I also kept the old slide, because this is a very contentious point, as a number of people have already mentioned, and we do want comment and input on this.

The President's directive requires that good agricultural practice guidance and good manufacturing practice guidance be developed to account for specific commodity and regional differences.

USDA and FDA are considering all options on how to do that, and we want comments on these options.

The old slide, which maybe I should have taken out, but I didn't, because we want you to think about it, used to say this:

"Specific good agriculture practice and good manufacturing practices for fresh fruits or vegetable products were to be identified in FY '98 and work be done on them and try to identify other ones."

Well, at our first few grass-roots meetings, that was kind of a contentious point.

Obviously, people wondered, well, if you have the broad-scope guidance out there, and you think it has

certain universal applicability, why not wait awhile, measure that and see if you are making progress and see if specific documents are even necessary?

What does it imply, if you pick a specific document -- does it make one fruit and vegetable suddenly sprout a big red sign, with a "stop" across it, if government does that?

We certainly do not intend it to be that way, and would not craft it that way, but you know some people, if you start doing this, someone will be first.

And the criteria of the deciding this has not yet been selected. But this is what we were talking about, I believe, in the first four -- I believe this slide was even up there --

John, was this slide used in the west one in Texas?

MR. VANDERVEEN: Yes.

DR. GARDINE: This is the challenge that we have now. We have to account for specific commodity and regional differences.

How do we do that? Our initial thought was to develop commodity-specific or group commodity-specific good agricultural practices.

But are there better ways? Are there better ways, such as working through Extension

Service Institutions and academia, and asking them to do the research and work on these?

2.4

Are there -- is it a better way not to do it at all? Although that would not enable us to meet the President's charge to us, so you know, he's our boss. You got to remember that.

But the timeline we were talking about, at some of the earlier meetings, and I'm saying this to be consistent throughout, was that we would try to select four commodities sometime in December, to get started on.

Those timelines have gone. We want to hear the comments from industry about what are the best ways to do this.

Is it working with trade organizations, working with regional groups, and seeing if we can work together to adopt or modify guidance you already have out there?

Any ideas or suggestions you have are -- at this point, we want to hear about them, and are on the table, but the key is to enable us to meet our directive, our charge from the President, account for specific commodity and regional differences.

One of the things we thought would be good about specific-commodity good agricultural practices, because you could really focus on what, you know,

might be unique practices for certain commodities, and talk about what a grower could do to limit the risk associated with certain of these practices, which you can't do in the broad-scope document we're going to be talking about today.

But, please, we need your ideas on this and we were -- we are listening to what we are hearing at these grass-roots meetings, and they are having an effect with us.

"The document is guidance and not regulation."

Well, what does that mean? Are you going to put it out there and walk away from it?

Absolutely not.

We are going to be working with industry to supply outreach assistance, education, to try and encourage and work through trade organizations, to have growers adopt these practices, where feasible, for their operations.

I want to stress that, as we get to the good agriculture practice document, you will see it's not a one-size-fits-all document.

It is something that -- I was very pleased to say that I think it was at the Grand Rapids' meeting where someone -- one of the favorable comments we received was that, "It looks to be almost

a self-assessment that a grower should do of their operations, see where problems could develop, and then let him use his intelligence, experience, knowledge, plus the guidance to make improvements where practicable and doable."

That was one of the favorable comments we received, and I hope you see it the same way.

But we at FDA and USDA are going to have to find the best way to supply education outreach and assist the answer, and get the word out, of what we are trying to accomplish through these good agricultural practice guidance for domestic industry.

And if we're going to do it with domestic industry, we are going to have to do it with foreign countries.

So, much of the rest of this year, until we get a budget to do it, it is going to be with USDA and FDA figuring out, "What are our mutual resources?"

"How can we best reach the grower, both domestically and internationally, and work with them to encourage adoption of many of the principles in this guidance document"

We have an easier task domestically, because domestically, obviously, we have an

infrastructure through the Extension Service, through your trade organizations, through States, that already exists for outreach to the farmer.

So FDA will probably be walking, you know, to the backside, domestically, but, internationally, that infrastructure may not exist. So we'll have to figure out how to do this, and we'll have to develop training modules, and also see how we could work within international organizations, such as FAO internationally, and also with local government.

One more thing on the President's initiative, before we open this part of the session up to questions, is the timeline.

Many folks at the previous meetings, and I think we heard some of this today, were concerned about what they believed was the rush to judgment -- rush to finalization of this broad-scope good agricultural practice.

Well, once again, let me remind you that a lot of work had been done by industry itself, a lot of damn good work, by industry itself.

Western Growers, United Fresh Fruits and Vegetables, local organizations, had guidance documents out there that we could plagiarize, borrow, massage only slightly, when we didn't want to absolutely plagiarize, but there was -- there is a

lot in our document that was taken from the very good work already done by industry.

2.4

2.5

So, for the broad-scope gap, we thought we could move quickly. But let's go through the timeline.

As I said, we first discussed what were our concepts at a public meeting in February of 1997. We then discussed this further in February with the National Advisory Committee for Microbiological Criteria in Foods at a public meeting, where they discussed what advice they could give us.

In December of 1997, based on what we heard at the public meeting, and from the National Advisory Committee for Microbiological Criteria in Foods, we developed the initial draft.

We were initially thinking, in our foolishness, to go out to growers without a draft and say, "We're with the government, we're here to help you, don't worry about this, but it's going to be okay, but we're not going to show you what it is."

People told me I probably wouldn't come back if I did that, so we delayed at least a week or two starting the grass-roots meetings.

In December we started the grass-roots meetings; we're doing them now. Everything is being transcribed. The transcriptions are available in a

public document, and anyone who wants them, and is willing to pay the per-page cost, can obtain them.

So we will be getting these transcripts back, critically evaluating all of the concepts that come out of these grass-roots meetings.

Plus, I want to remind you, as I said, the devil is in the details.

Frequently, it's difficult to put your thoughts together in one day. The Federal Register announcement for these grass-roots meetings indicates that written comments would be accepted by December 19th.

As one of the drafters here, Joyce Saltsman, frequently tells me, "We never turn down a good comment."

So then, if things come in little later than December 19th, we would certainly consider them. Sometime late February or early March, we hope to publish in the Federal Register a notice of availability of a guidance draft document.

This is still a draft. We are doing all of this to have a draft document ready by late February or early March for publication.

The draft document goes in the Federal

Register with a 45-day comment period, at which time
written comments should be submitted.

Written comments will be evaluated, and we will use those written comments to do further manipulation on the draft document, with the goal of maybe in May or June -- this is not definite -- having a second public meeting or additional grass-roots meetings, if necessary, and looking for a July publication date.

I want to stress, we're doing all we can to

I want to stress, we're doing all we can to make this as transparent and public a process as we possibly can, and why?

Because we can't do it alone. We need the growers' knowledge, we need the growers' experience. You know what is doable. You know what is feasible. You know what will help solve the problem, probably much better than we do, and we need your thoughts and the only way to do that is through a public process.

With this, we traditionally take a break -not a break, but a stop, and ask if there are any
comments on the process, and the President's
initiative, any thoughts or questions.

Anybody? Stacey?

DR. ZAWEL: Thank you. Actually, I have one.

DR. GARDINE: Thank you. Get it started.

DR. ZAWEL: I am Stacey Zawel with the United Fresh Fruit and Vegetables Growers

Association.

2.5

This is actually a detail. I'm wondering, in all of these meetings, there is going to be a heck of a lot of information that the court reporters are getting down.

How are you guys going to -- who is going to be responsible for all that?

My question is '-- is that it seems like such a monstrous task that it won't actually be done, and I certainly hope that that doesn't happen, and I feel sorry for the person whose job it is to do that.

But how, technically, do you facilitate that process?

MR. GARDINE: Okay. I will go over this, and if Dr. Vanderveen or Dr. Saltsman want to add anything, I will invite them to do that.

The Center for Food Safety and Applied Nutrition, the portion of FDA that is working on developing this guidance document, and I have to remind myself to say "guidance."

Being a contrarian by nature, and having been instructed to say "guidance" all the time, I still say "regulation."

Please ignore that. It is not a Freudian slip. It's just my contrarian nature. I don't take

direction well. It is not a regulation, and it is a guidance. If I slip, please forgive me.

The transcripts will come in. We are paying extra to get the transcripts done in five working days. A team is being put together at the Center for Food Safety to read the transcripts and pull out suggestions and ideas.

That's going to be the challenge of -- through the end of December and early January.

At that point, we have been working with -I do not know whether this was done through AFDO or
the National Association of States Department of
Agriculture.

We are hoping, and I think we have a tentative commitment, to get some State agriculture people to come in and work with us, to review the comments and come up with suggestions or responses.

A suggestion might be to reject the comment. I mean, that is always an option, but if we believe the comments are viable and worthwhile, after a joint discussion, we will then work together and find a way to incorporate what we think are better comments into our document.

Anything else? John?

MR. VANDERVEEN: Fine.

MR. GARDINE: Please identify yourself from

the microphone, please.

MR. BROWN: Good morning. My name is Louie Brown with the California Farm Bureau Association.

In May or June, there may be a second public meeting. Who will determine what is needed?

MR. GARDINE: I think that will be determined based on the significance of the changes that may or may not be necessary in the document. Obviously, if everyone comments on what you have in front of you, and then we put something close to it out as a Federal Register document, as a draft, and then, after reading the comments from the draft, we decide we have to completely change, it will be kind of unfair to just go to publication without doing some sort of outreach again.

So that's not definite, but the key to that will be the amount of change associated with the guidance document.

Any other questions or comments before we continue?

MR. GARDINE: Okay. Can you get the lights and we'll keep going here? Once again, please bear in mind that, as we start discussing -- that's where it went. Damn it.

That was supposed to be my second slide in the front part. People have been coming by and

borrowing my slides and putting them back, and whatever, so please ignore that one.

We're here to talk about the guidance document that you received today, "The Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables."

Once again, let me begin by saying the document is limited in scope. It's attempting to address microbial hazards associated with fresh produce. All the other things, pesticides, the other things that might be of concern to you as growers, to we as government officials, to the consumer, are not being discussed in this document.

Why are we doing it? I discussed this already. Recent outbreaks have raised concerns about the safety of foods, including fresh fruits and vegetables that are not processed to eliminate pathogens.

The only point I want to add on this is that, what makes your product unique, the consumer pops it in their mouth. It's not going to be cooked, either in -- by an industrial processing facility or the consumer's home. It's a fresh product that they are going to eat as is.

That's why limiting the amount of microbial load, doing what we can to control what we can, is so

critically important, because the normal additional protective mechanisms of, you know, boiling something and cooking it, and subjecting it to heat that will destroy microorganisms, is not here for this type of product.

2.4

Well, I always get ahead of myself. Fresh fruits and vegetables are not subject, generally, to many of the steps designed to reduce or eliminate microbial load that processed foods receive.

Therefore, taking steps to reduce the risk of microbial contamination is especially important for raw produce.

Once again, I've got to say, it's reduced. You can't eliminate. The only time we're going to be able to talk about eliminating is when and if the science and research can find absolute control, mechanisms that would destroy the organisms in the field; not likely any time soon.

The best you and we can hope for is to minimize microbial risk and control.

A template for the document. In the document we tried to think about things that have broad applicability to the produce industry that could introduce, if not control, as well as we can, unnecessary microbial load onto the produce.

They are water, manure, worker, field, and

facility sanitation and hygiene are kind of lumped together, and transportation.

These were things that we thought had -well, nothing is universal, but this is what we
thought were as close as -- the concepts involved
here as what -- we believe are as close to universal
applicability and concern for agriculture as is at
all possible.

The guide is intended as guidance only. I believe you have heard that already. Growers are urged to take a proactive role in minimizing food safety risks.

This is not a one-size-fits-all document.

Once again, tip our hats to what industry has already done in developing specific guidance for certain crops, and their own versions of broad-scope-type guidance.

You are already taking a proactive role, but what we would want with this good agricultural practices and good manufacturing practices document, and the ones that are out there, it is not one-size-fits-all.

You really have to evaluate your own operation and figure out what you can do.

And the guidance that contains the best advice of FDA, USDA in consultation with industry and

consumer groups.

The document focuses -- once again, it's as broad scope, and as universal and applicable as we can make it on common elements in growing production and distribution that will reduce the risk of microbial contamination.

We admit in the document that many GAPs in the science lead to uncertainties in the degree of risk associated with particular farming practices. There is research that must be done.

One of the components of President Clinton's initiative is funding for research. We are already asking for that funding money, and trying to figure out what research is necessary, what should be our priorities? That is something that we would urge comment on also.

And also how to do this research.

When there is uncertainty, we tried in the guidance document to identify the uncertainty, recognize it where we can.

The guide is intended to provide practical advice appropriately qualified. We will -- and FDA and USDA are accelerating research in an attempt to answer some of the major questions that have arisen, but look at the first bulletin there, "practical advice."

One of the things that we need to hear from growers is, is this doable? You know, is this doable?

Is it practical, or, "What world do you people live in? You can't be serious about this."

One thing I will talk about now -- there is a slide coming up, and it had to do with the use of untreated manure on a field, and I believe that we say that, generally, there should be a minimum time frame of 40 to 60 days, but in some cases, some studies say 120 days between use of untreated manure and harvesting. And this was up in the northeast, up in Geneva, New York, and one of the growers says, you know, "Really nice advice, 40 to 60 days, maybe. But do you have any idea of what the growing season is in the northeast?"

And that's the sort of thing we have to hear. "It's not particularly practicable." Those are the comments that we need from you. This is -- and where I can, I'll share things like that, that we've been hearing in other places.

One thing you must bear in mind, like everything in our society, growers are already regulated. You are dealing with IPA, you are dealing with OSHA. In some areas, guidance is already out there in the form of Federal, State and local

requirements.

Nothing in our guidance document should ever be intended or interpreted as circumventing the need for you to meet with any local, Federal or State requirements on your operation. Frequently the States and local authorities already have more detailed guidance, or, in some cases, regulations out there for you to follow.

You got to obey the law as it is currently written. Nothing in this guidance document is intended to circumvent that requirement on you.

And for example, even on a farm operation, a packing house often might qualify as food establishments under the Food, Drug and Cosmetic Act, under FDA, and in that case, they should be following the good manufacturing practices contained in Title 21 of the Code of Federal Regulations, Part 110.

In some cases, there are already regulations out there applicable to certain parts of your operation. You are going to be expected to follow them.

Once again, I hate repetition, but it is one way to fill up two and one-half hours. There are common potential vectors for pathogens for all fresh produce, such as water and manure. The broad-scope document is attempting to identify them, but we do

recognize there is an enormous range of farm-size-available water sources.

If you are already drawing your water from the river, and that's the only thing available to you, you don't have many options frequently; climatic and soil differences, climatic, this story that I told you about -- limits on some of our recommendations in -- on manure use that might apply in colder climates, fertilizer sources, employee availability, farm practices.

It's not intended to be one-size-fits-all. You are supposed to read it critically and see where you can apply it. Cultural practices may vary and the bottom bullet is what we want you to think about and comment on:

How can we best provide practical, concrete advice to growers that will move us toward safer produce without -- or at least keep produce as safe as it is in this world of emerging packagings, without being unnecessarily costly to growers?

That is the key question. Keep that in mind until you get to an open mike.

Now, some of the specific guidance in the draft document you have in front of you, once again, you saw the template: Water, manure, hygiene, both field, facility and worker, and transportation.

Some of our comments on water: Once again, the devil is in the details, you have to read the document to get the details.

Water is a concern in two aspects. Water which is contaminated itself is an inherent source of contamination, but even in clean water, if used improperly, if you don't think about how you use it, could be a vehicle for spreading pathogens, that might be localized and spotty, in the produce throughout a harvest in either the field, during the harvest or in the packing house.

So even good water could be a problem if used improperly.

These are just a list of some of the pathogens that water has been found to contain. I believe all of them have been associated with some illness out-break, although not necessarily -- well, I shouldn't say absolutely. Not all of them are associated with fresh produce, but it's some of the concerns we have with water.

Because of water's potential as a source of pathogenic microorganisms, growers should carefully analyze practices involving water and seek to limit the possibility of waterborne contamination. Well, easier said than done.

We realize that, but this is the key

thought behind what we want to say. Recognize the potential for water source to contain pathogens. Remember that that is a problem.

Sometimes it's a problem you can do something about because you might have options. Frequently -- or sometimes it may not be, but you should always be thinking about pathogens and your water source as a potential for adding unnecessary microbiological load to fresh produce.

The second bullet is also very interesting. Water should be of sufficient quality for its intended use and don't bother to look in the document for what "sufficient quality" is. We don't define it. We would be interested in thoughts and comments on what that would be.

Identify the source of water itself in different operations. This will vary with use and should be tailored to the needs of a particular operation.

The closer your product gets to the consumer, through various steps in a packing house, during harvest, the better, hopefully. You should be more concerned about the quality of the water you are using.

You should always be concerned about it, but it becomes more critical -- the most critical

thing will be the final wash before you package it and put it on the truck. That should be the best water you have, and once again, the guidance does not preempt any applicable Federal, State or local regulations.

Among the things we want you to consider, according to the guidance, identify and review the source of water used on the farm. As the degree of water to produce contact increases, so does the need for good quality water. The more the water is in direct contact with the produce, the more likely it is to leave some of these microbial pathogens of concern behind. Common sense. But sometimes difficult to deal with.

Your review may include determining whether the source of the water is from a well, open canal, reservoir, reused irrigation water, a municipality or other sources.

In each case, there might be different options available to you to better ensure the quality of your water. Once again, some further suggestions I'll give in the guidance document.

Controls may include many options such as delaying water use until water quality improves.

Well, you know, if your crops have to be harvested, if -- or irrigated, you really can't delay that.

In some cases, it might be an option available to you, but, you know, you got to grow your crops. You got to get them to market. You got to wash them for packing.

But it is one option suggested in there.

Water treatment is another option if you have a high microbial load in your water source.

Alternative application methods that avoid water-to-produce contact.

Let's remember, the more the contact, the more the likelihood of spreading contamination and maintaining alternative water supplies.

The feasibility of these or other controls will depend on the intended water use and the needs and resources of a particular operation.

Once again, if you've only got one water supply, that's what you have to deal with. Your options become limited. We realize that.

A few little thoughts about irrigation water. Many factors influence a grower's choice of irrigation. You can now mix the water economics, water availabilities. Depending on the crop growers, you may need to consider using water delivery systems such as drip irrigation that minimize direct water-to-produce contact for certain produce.

It's a good comment. It may be applicable

for some crops. Among the comments we've been getting, at other meetings, is the cost of introducing a drip irrigation system, depending on the type of crop, and the amount of land involved. This is some of the things we've heard, I think, both in Grand Rapids and in New York.

You should also be aware of the use of crop protection sprays, and the feasibility of them as a mode for transmitting microbial contamination contained in water to produce.

Water used to mix and load pesticide sprays should be considered a potential source for pathogens.

It is interesting to note that we have never really solved absolutely the problem of Cyclospora associated with Guatemalan raspberries, but among the items of possible causes of the problem brought back by some of the CDC and FDA researchers that went down there is the fact that, in order to protect their well water source from chemicals and perhaps back-flow in mixing crop protection someplace, they go down to the local river when they were preparing their spray for fungicides and pesticides, and they use that water, which was nowhere near as good as the well water.

Something that they are not aware of, and,

you know, we want everyone else to be aware of, too.

2.6

Wash water, safe and sanitary water is recommended for use in washing produce in the field and in the packing environment.

Let's remember, washing is one of the things that helps remove dirt, and dirt which might contain these pathogens from the produce, but, once again, if done improperly, if the water source is contaminated or if the washing procedure is not adequately controlled, water might do nothing more but spread localized contamination through the produce.

Wash water, even with sanitizers, may reduce but not eliminate, pathogens on the surface of the produce. If pathogens are internalized, which in some cases they can be, washing has even less effect.

Among the comments we received when we talked about this, once again, we put them all on the table, I believe there is a recommendation in there that, for certain produce, the water used to wash should be ten degrees warmer than the produce because of the possibility of internalizing pathogens.

Many people, you know, at some of the meetings saying, uh, you know the idea, "One of the reasons we wash is to get the heat out of the product and help preserve the product and cool it down

quickly. And what you are doing is, you are inviting us to increase rot and degradation of our product by doing this."

It's one of the comments we have already received. Any other thoughts on that, we want to hear them.

2.3

If pathogens are not removed through inactivity, they can spread so that a significant proportion of the produce is contaminated, instead of sporadic item.

Once again, if you are going to wash, you have to think about what you are doing to it the best way possible. Don't spread localized contamination.

We mentioned chlorine as a potential water treatment to -- as one of the ways to do a better water wash and kill microorganisms. It's discussed fully under the wash water section of the document.

Cooling operations.

Water and ice used in cooling should be considered a potential source of contamination.

Any time water comes in contact with the product, it has a potential for adding or spreading contamination. That is the key point in almost everything we're talking about here with water.

Growers should be aware of water source used to make ice and follow practices to reduce the

risk of contamination during cooling operations.

The final thought I was asked to put on the board as we talk about water is, remember, even good water can be a problem. Water can be a vehicle for spreading localized contamination.

So even if you have a good water source, it's not a sterile world. Some of the product may be contaminated through natural causes, and if you don't wash it and control wash water properly, you might be spreading your problem rather than solving it, even with the use of good water.

Manure and municipal sludges.

Some of the thoughts in the guidance document under this section: Health officials and scientists agree that animal manure and human fecal matter represent a significant source of human pathogens. Most of the diseases we are talking about here are transmitted through the fecal-oral route.

So this is really key to control.

The use of manure or municipal sewage sludge in the production of produce must be closely managed to limit the potential for pathogen contamination of produce.

Growers must also be alert to the presence of human or animal fecal matter that may be unwittingly introduced into the

produce-growing-and-handling environment.

2.2

What we're talking about there is control in the fields of wild animals and water fowl.

This also generates a great deal of heated discussion as some of our grass-roots meetings. One of the questions I believe I received was, "Do you know what it costs to put up a deer fence around 40 acres of land?"

And, of course, I had no idea, but perhaps you do, and would want to add more on that.

Properly treated manure or municipal sewage sludge can be an effective and safe fertilizer.

Untreated or improperly treated manure or sludge used as a fertilizer to improve soil structure or that enters surface waters through run-off may contain pathogens that may contaminate your product.

So you got to be thinking about the use. You got to remember it's not just going to improve your yield. It's not going to only be good. There are potential problems here. You gotta think about the use. That's all we're asking you to do.

We realize municipal sewage sludge is not widely used on growing fresh produce. But if properly treated, there are some studies out there that shows it can be beneficial. That's why we mention it in the document.

What are the sources of fecal contamination most likely to involve produce?

We believe they are, the use of untreated or improperly treated manure, nearby composting or treatment operations, run-off, wind spread from an operation of composting or manure pile that is not properly controlled, nearby livestock or poultry operations.

All things you should be aware of. Nearby municipal waste water storage or disposal areas and high concentrations of wildlife in growing areas.

Growers may need to develop and follow good agricultural practices for handling manure to reduce the potential of introducing microbial hazards to produce.

Practices may include: Processes, such as composting -- we are going to talk a great deal about composting in the document -- to reduce possible levels of pathogens in manure. Minimizing to the extent feasible, direct or indirect manure to produce contact, especially close to harvest.

As with water, the closer your produce gets to the consumer's table, the more care and concern you as responsible growers should apply to your operation. Assessing adjacent and nearby land uses to determine risks from animals that may shed

pathogens that can cause contamination.

2.2

There are a number of ways we realize to treat manure to reduce pathogens. There is an extensive list discussed in the document, but the one we talk about most is composting, and composting refers to a managed process in which organic materials are digested aerobically or anaerobically by microbial action. Properly composted manure can be an effective and safe fertilizer and/or soil amendment.

One of the areas where we specify in the document that research is needed is in composting. While FDA and USDA do not now have sufficient data to make specific time and temperature recommendations that would apply to all composting or other manure treatment operations, good agricultural practices may reduce the risk of microbial cross-contamination from manure to fresh produce.

We don't -- we suggest you work through Extension and State agencies for the best advice currently available, what advice we believe -- is supportable is in the document.

Now talk about -- in the guidance document, we talk about GAPs for both treated and untreated manure will vary.

Untreated manure.

Here is the one that got me into a great deal of trouble in New York State, the idea being, reduce contact of the produce with the untreated manure, as it gets closer and closer to harvest, by maximizing the time between application and harvest.

Recommended minimums generally range from 40 to 60 days before harvest. Some recommendation are 120 days or longer.

What they told us is, "Well, 120 days is a bit beyond our growing season. If we do it in the fall, you get problems with run-off and perhaps contamination of water sources in that way."

The treated manure, the natural fertilizer, such as composted manure, may need to be produced in a manner to reduce the likelihood of introducing microbial hazards.

Once again, what advice that good science can give is we believe in the document, we believe more research is needed.

Care should be taken to avoid cross-contamination of fresh produce from manure that is in the process of being composted or otherwise treated. Common sense, you know: Don't put it on the uphill slope from the field where you are growing your produce.

Likewise, improperly treated or

incompletely treated manure may also -- may itself be a source of contamination.

2.2

Composting and other treatments may reduce, but might not eliminate, pathogens in manure. Here is another place where further research is necessary.

Furthermore, it is unknown to what extent pathogens that survive treatment may regrow in composted manure that is stored before use.

Therefore, what we recommend in the document, to the extent feasible, growers using treated manure may want to consider some of the recommendations made for untreated manure, such as maximizing time between application and harvest.

In handling manure, we give -- obviously, we just try to point out some of the things that could go wrong. Secure the manure or compost to prevent cross-contamination from run-off.

Once again, it should be somehow secured, probably not uphill from your growing fields; secure it to prevent leaching into the soil and wind spread.

The next major component of the document is --

Do you want to keep going?

MR. NELSON: It's 10:30. Do you want to take a break?

MR. LOWELL: I'd appreciate it.

MR. NELSON: Okay. Give them 15. Let's take a 15-minute break, and please be back by quarter 'til.

(A break was taken between 10:30 and 10:45 a.m.)

MR. GARDINE: If you would please settle down. The important thing is to hear from you, and we would like to get to that as quickly as we can. We were about to start talking about sanitation and hygiene.

As a beginning point here, among the comments we were constantly receiving, wherever we went, was the way this is reading, "You are imposing a burden on the grower to be concerned and to take some responsibility for the health and the hygiene of their worker."

The answer to that is, Yes, the way it is written now, the document is doing that.

But beyond that, I just want to stress that this is no different -- these points are no different than what FDA says for retail for food handlers, in general, and this is something that is something that will go directly to the consumers table, without any processing to remove microbial load.

So, as public health officials, I have to say, I certainly feel kind of strongly about this, if

there are -- if the same concern is held here about the responsibility and the need for the grower to be aware of some of the things we talked about here, please bear that in mind.

1.6

It's no different than what we ask a person running a restaurant to consider in controlling workers, and what might the options be, and how can we, in attempting to ignore microbial load on fresh produce, ignore something like this?

Worker health and hygiene play a critical role in the controls to minimize microbial contamination of fresh produce.

Fecal-oral disease are the primary -primary microbial concern. All of the diseases we
are concerned with here are generally through the
fecal-oral route.

To control potential hazards, personal health, good hygienic practices by all workers are essential in the control of microbial hazards.

Infectious disease, ill health with diarrhea, open lesions, and so forth, are a source of microbial contamination and can be transmitted to produce.

Among the recommendations we make, employees should report, to the person in charge, any information about their health or activities as they

relate to diseases transmissible through food.

Well, we hear from growers in other parts of the country, "Well, yeah, that means we're not going to pay them. The first time we don't pay them, we are going to stop hearing these reports."

Still, can we appropriately ignore this as a source of contamination of food?

Are there other things -- are there other ways we could phrase this in the document, i.e., encourage, where possible, that the worker drive the truck that day, or where possible, be assigned on other duties?

I realize that there is only so much type of work that needs to be done, and when you are harvesting, you need harvesters, but think about options. This is something that's going to be very difficult for us to turn our back to.

Here is a key thing of concern: The person in charge should monitor, we say, the health of employees. Individuals with diarrheal disease should not work with fresh produce.

Once again, very similar to what we say to people handling food on the retail level, something we feel strongly about, something I think most public health officials in this country would agree with, but difficult to do, but in a guidance document,

should we not at least make the point and find ways to work toward that goal?

All employees who are involved in the harvesting, packing and distribution of fresh produce should be trained in good hygienic practices. Don't think they know how to wash their hands properly.

Consider establishing a training program. It doesn't have to be grower-specific. Perhaps it could be a County program. Perhaps it could be an industry or valley program, but something like that should be considered and the program should include -- might include a system to monitor and evaluate compliance with the program.

The employees should be taught proper hand washing techniques, use of sanitation facilities, such as on-site latrines, and avoiding the elimination of wastes outside of these facilities should be encouraged.

If I were the drafter, I would say "must be encouraged," which is a personal opinion, but it is quidance.

In the field, some of the things -- some of the recommendations we give about what's happening out in the field:

The proximity of toilet facilities, one of the key things.

Remember: Fecal-oral route, transmission.

The proximity and accessibility of facilities to harvest crews in all sectors of fresh produce production is important.

2.2

Folks ain't going to use it if it ain't there, or if it's too far away. Workers should have the opportunity to use facilities when needed, not only when they are on break.

This will help reduce the incidence of workers relieving themselves elsewhere. I will not go into that in great depth.

Assure that the location of facilities is not near a water source used in irrigation or in a location that would subject it to potential run-off in the event of heavy rains. Just as you would control a manure pile to prevent contaminating the fields, you should do the same with port-a-potty.

Adequate hand washing stations should be made available. This -- we are talking about basically facilities itself both in the field -- and all this applies, I should say, to both a facility such as a packing house and the field.

Toilet facilities should be well supplied with the usual, and maintained in sanitary condition and in good repair at all times.

Things we ask you to consider in the

guidance document: Clean or service portable toilets away from the field, if possible.

Once again, we are trying to avoid contamination of the food with fecal matter -- with untreated fecal matter.

Dispose wastes through a sub-surface septic tank system, if possible. Drain waste water away from the field, probably, always, or collect it in a drainage tank to be correctly disposed of at a remote site.

In harvesting your crop, one of the things that is suggested is that you remove as much dirt and mud as possible from the produce while in the field. Why?

Even if you wash it in the packing house, why carry that dirt?

Dirt is a source of contamination. Clean as much of it in the field as possible. It's going to be more effective and less likely to spread pathogens once you get the product to the packing house.

Something you can control, damaged or muddy cartons, should be repaired, cleaned or discarded in an effort to reduce microbial contamination of fresh produce.

Don't put the product in dirty packing,

even if it's just packaging to take it from the field to the packing house. Even if it's just that crate.

2.4

Care is needed to ensure that produce that is packaged in the field is not contaminated in the process. And we recommend that inspectors, buyers, visitors, wash their hands or wear clean, disposable gloves before inspecting produce.

Early on in the document, there was a lot of talk about suggesting use of gloves in packing houses and whenever handling the document.

We heard that that was impractical. But we do demand that hands be washed, or the document gives quidance that the hands be washed.

Certainly, in other things like our food code, that is clearly gone over, but when you are having people come in and visit that are going to be touching the produce, not as part of the production where they need that manipulation, make sure they wash their hands or wear gloves.

Equipment maintenance. We're talking here about equipment in harvesting in the field. There should be a person in charge of maintaining the equipment sanitation, and know what the equipment is used for.

It is inappropriate, for example, to use the same truck to haul manure and product, cleaning

it, to use it to pack your harvested crop to bring it to a packing or cooling house, you are just adding microbial load.

Someone should know what the equipment is used for and maintain it in clean condition appropriate for its use. Keep the equipment as clean as possible. We realize you are in the field. We're not talking about sparkling here.

Items such as lunches, if you will, tools, should not be carried on harvesting equipment, and remove contaminants, mud, diesel, grease, et cetera, from equipment daily. Anything that would add to your microbial load that you can control reasonably.

Anything.

And we're now in the packing house facility
-- anything in the process from harvest to
processing that makes contact with produce has the
potential to contaminate it.

The bottom line is, what we've been talking about all day is, poor sanitation in the packing house can increase the risk of contamination of produce and water supplies used with produce.

Once again, nothing we say in this guidance document eliminates the need to comply with other applicable, local, State or Federal regulations.

We also refer you to the general Code of

Federal Regulations, entitled Code of Federal Regulations 21 -- Code of Federal Regulations, Part 110.20.

2.0

2.5

The same as in the field of -- but in the packing house, certainly more care should be taken, because, once again, you are getting closer to the consumer's table, equipment should be kept clean and defective equipment removed as appropriate.

Equipment should not be used inappropriately and not for its intended use.

Keep the packing house and cooling facilities clean and sanitary.

Talk about pest control. Obviously, once you are in the packing house, there are -- this starts to become more of a concern. All animals are potential sources of contamination.

In enclosed facilities, a pest control program is essential to limit the contamination from pests. Packing house, processing facilities and grounds around them should be in good condition to protect from pest contamination inside.

I think it is the enclosed packing house is probably the only place in the guidance where we talk about suggesting record keeping and we talk about -- we suggest maintaining a pest control log to make sure that you are keeping control of something that

is controllable in an enclosed packing house.

The final part of the document that we believe might have some final control, or part of your operation that we believe might have some universal applicability in adding microbial pathogens to produce, is transportation.

Contamination of produce may occur due to improper practices during handling, loading, unloading and transportation operations.

Transportation, whether from the field to the packing house, from the packing house to your purchaser, is something you should be concerned about. Wherever produce is transported, the sanitation conditions should be evaluated, especially between links in the distribution chain.

Cross-contamination from other foods and non-food sources and contaminated surfaces may occur during transport.

Segregate fresh produce from other food and non-food sources of pathogens in order to prevent contamination of the produce.

What we're concerned about here is, you put it on the truck, what's going to happen to it?

Try to assure that instruction or other carrier sanitation requirements are met before loading produce.

Remember, we're talking about produce here. It is not a sterile product. Everything we're talking about, up 'til now, is reducing microbial load. We don't expect the truck to be sterile, but it should be clean.

2.4

And depending on its previous use, if that can be determined, maybe it should have been sterilized before we put produce in it? What was it used to haul before your product got on it?

Keep open communication along the transportation route regarding food safety risks and the need for adequate safety steps.

Hey, you should be talking to the people transporting your product. Let them know what the concerns are with transporting fresh produce, and what they should be aware of and what you expect of them.

There is a final part of this document that has nothing to do with reducing microbial load. And that is the section on what is up here is trace-back, but it's really positive lot identification.

It is something we put there to encourage industry to consider and see where it's applicable. We're talking about where can we code the product to enable you, State authorities, local authorities and Federal authorities, should there be an out-break, to

trace it back to its source.

We think this is something you should consider because it's good for you, it's good for us, it's good for the health of the consumer.

Positive lot identification for produce, we believe, is necessary because fresh produce will never be free of contaminants. As is said many, many times, we're talking about reducing and controlling microbial load on fresh produce. Until other research and other control steps are found, you can't eliminate it.

Trace-backs won't prevent a hazard, but it could, if done properly, limit the potential scope of the out-break if health authorities can focus in on something very quickly. Limit populations at risk. Lead to specific company source or growing field, as opposed to the entire avocado industry. Well, the person implicated is Joe's -- you know, Joe's farm.

operators not responsible for the problem, and we realize, of course, that, depending on how the fruit or vegetables are marketed, this is more easily implemented for some commodities than others, depending on how they are packaged, or are they displayed in bulk, because that's what people like to see, is nice, ripe fruit and colorful vegetables when

they walk into a produce market.

2.4

But we're suggesting you do what you can.

Make sure that your packages, when they leave your

farm, are adequately identified, and we will be

working with the retail industry to encourage

maintaining that as far down the chain as we possibly

can.

Trace-backs minimizes -- now, from -- as public health officials, we, the State authorities, the local authorities, CDC, trace-backs would minimize the unnecessary expenditure of public health risks. If a package is adequately coded or properly identified, we could focus in on where the risk is most likely to have occurred as quickly as possible. It will reduce the anxiety of the consumer. It frees consumers to enjoy fruits and vegetables not implicated in the out-break.

I'll repeat again, the Federal Government, State and local authorities are saying, "Eat fresh fruits and vegetables."

Why? Because it's good for you.

We are encouraging people to do this and we don't want anything that will pull them back from consuming this very nutritious and very wise life choice for them. Outbreaks of this nature do that.

We want you to consider your current

procedures for positive lot identification, and if possible, develop procedures that you control as far down the distribution chain as possible.

2.2

You may have to work with the people that you are supplying and see what you can come up with together.

Here are some -- this is -- I'm not going to go into this in great detail. It is contained in the document. Some suggestions on what would be the most effective type trace-back, for us and I'm going to shut this off now, and if someone would just shut the projector, one other story.

And for those of you who have been to the other presentations, you are going to have to hear this story again, and it's very true, and I tell it now because I think it helps identify why we want --we encourage positive lot identification, and why this whole episode -- this whole initiative on the part of the President is ongoing.

Those of you in California probably remember the Hepatitis A in processed strawberry incidents of this year.

We at FDA know that we do not know if it was the fresh strawberries from Mexico. We do not know if the problem occurred in the packing house.

We do not know if the contamination occurred in the

food handling. That was never identified. This was never stated by Federal authorities, certainly not State authorities. It may have been misquoted somewhere locally, as being absolutely a cause -- caused this illness outbreak in the schools -- and I believe it was Minnesota? --

VOICES: Michigan.

MR. GARDINE: -- Michigan? I got the "M" right -- as being due to the fresh strawberries that were imported from Mexico, then processed in the United States, and then served in the school lunch program.

But that week, when that story was breaking and making the national news, I got a call in my office, which, as you heard at the introduction is the Division of Import Operations.

We pride ourselves, or like to pride ourselves, sometimes we meet this criteria for ourselves -- in Customer Service.

Our customers are the local FDA offices who are doing import work primarily, but also the importers, because when they have problems, they come to us, and we have to either tell them that our district is right, or work with them to see what corrections we can make if we think we mis-spoke.

I got a call from an importer calling on a

totally different matter. I was real busy that day. It was a bad day. I think we had another problem ongoing because, quite frankly, since we never identified Mexican strawberries as the cause, this was something my office was tracking, but not actively involved in, not getting great guidance out, certainly.

We never put Mexican strawberries on any sort of detention without examination because they were never clearly implicated in the product. But I get a call from this importer, I forget what he was calling about, but I wasn't there. He called in the early morning. I couldn't return his call until 4:00 or 4:30 that afternoon.

I felt kind of bad and I start by saying, sir, you know, "Mr. so-and-so, I'm real sorry. It's late and it's been a really bad day. Actually it's been a bad week," and this guy -- he is quiet at the other end of the phone, and then there is laughter, and he says to me, "I'm one of the biggest importers of strawberries from Mexico, and you think you are having a bad week."

He said he had nothing to do with supplying the plant in California. He claimed that his fields were actually in a different part of the country and he claimed, I'm sure with some exaggeration, that he

was having a problem giving his product away right now.

These incidents hurt us all. They hurt the American people. Of course, it denies them a sound and nutritious and encouraged source of food. It hurts the producer.

It is difficult for public health officials to get a handle on, and what we want to work with, in industry, States, local authorities, academia on, is getting the best guidance out so I don't have to take calls like this, and you, to extent possible, never have to deal -- if the guidance is good, it will limit your exposure to dealing with incidents like that.

Thank you all for your kind attention.

Now I think it's open mike, for any thoughts or questions of clarification on the quidance document.

Please, somebody? I would ask you to come to one of the mikes and introduce yourself.

Yes?

MS. RUSSELL: My name is Carol Russell, and I represent Pacific International Marketing. I just had a question. I was looking through some of the other paperwork. I think that I recognized that every step of the way is important and you are

talking about numbers when you're talking about -- reducing microbial incidents in general.

It seems to me that the consumer is a hugely important link in making sure this is done, and I know there was comment about education to the consumer, but isn't it of benefit to everyone to make sure the consumer understands, as well as every step along the way with the produce?

MR. GARDINE: Yes. We -- there is a consumer education program. We're gearing up right now. I believe it's "Fight-bac", B-A-C, for bacteria.

It's a consumer education program. I think in some of your handouts, the FDA hand out, I think it contained some of the literature we're creating to outreach to the consumer. The consumer is a critical link in the food protection chain, and let's remember what the President's initiative is, "from farm to table."

The consumer touches it before it gets onto the table and handles the product. We do realize that, and that is a very important part of what we will be trying to do.

MS. DODGE: My name is Elaine Dodge. I'm with "STOP," "Safe Table is Our Priority."

I have three questions, so I can ask three

in a row, or I can --

2.1

MR. GARDINE: How about -- yeah, three in a row, but we might have to repeat them, I think.

MS. DODGE: The first question speaks to the premise of the guidance document, and I'm not really sure why the FDA and USDA are the appropriate people to answer it, but my question is, what was in the President's thinking, or whoever it was who drafted this guidance document, that it in fact should be a guidance document, rather than a regulatory document, that, of course, being that all of us are most familiar with your capacity as regulators, rather than generators of recommendations.

My second question is, in response to what Dr. Breitmeyer said from the California Department of Agriculture, requesting that certain products not be identified or specified in the guidance document, so the consumers didn't draw an incorrect conclusion that they should be worried about some products.

My question is, three weeks ago, I was in Sacramento, and there was a series of epidemiologists who came forward and gave presentations on certain products that are in fact associated with outbreaks, and so I don't understand why it wouldn't be to everyone's benefit, particularly consumers, because

consumers are, you know, sort of the last critical control point for their own self-protection, why they shouldn't know which products are associated with risks, as opposed to ones that haven't been.

And then, my final question -- which you may be exactly the right person to answer it -- is, I -- it's repeated throughout the guidance document, a phrase about accounting for "specific commodity cultural and regional differences," and I really don't understand what that means, and I'm hoping you can give me some examples.

MR. GARDINE: To begin, and I think John Vanderveen may want to talk about this, why guidance and not a regulation?

Number 1, we do not believe that the science is yet there to support making this a regulation.

Number 2, we do not believe that -- yet that there is an absolute need for this as a regulation in order to effect what we want to effect, i.e., improved practices to minimize microbial health.

So basically, Number 1, in some areas, the need for additional science because, you notice, in this document, there are very few numbers. There are very few things about what to tell people to check

for in the water. There is a lot, lot of research that must be done.

2.2

But Number 2, in all honesty, we see this as something good for the grower. We believe this is something that the industry in the U.S., as their practices -- as their efforts to develop their own good practice guidance has already indicated, is something that is necessary for the grower, that they are aware that they are going to have to do, we see these changes taking place and we believe that, by putting out this guidance, we can encourage these changes, to some extent.

That's my answer to Number 1.

Number 2, are not some products associated with outbreaks, and therefore would it not be appropriate to make specific guidance documents for specific commodities?

I don't know how to respond to that since that's an open question, so we'll just take that as your comment on that.

And Number 3, if recollection serves, there is a statement about specific cultural and growing practices.

What we're trying to get to there is that it is very difficult to talk about one-size-fits-all in agriculture. I think the story I gave about the

growing season in the northeast is a prime example. We might talk about 120 days, and that might be applicable in Florida and Southern California and along in the valley in Texas near Brownsville, but it doesn't work in upstate New York because they don't have that kind of growing season.

Crops, depending upon the type of crop you are dealing with, the type of irrigation that is most effective for your crop, would vary.

For example, in some cases, flood irrigation, especially in -- when you are dealing with tree -- tree fruits, might be very appropriate to irrigate, but you damn as heck wouldn't want to do that with something like berries which would only result in mold and destruction of your product. You want to avoid water contact where possible.

So depending upon -- there is a great variation of what is doable, depending on crop, the growing conditions in the area, and that's why we do not believe this is a one-size-fits-all document, and must be tailored.

I do not know if I got to your third question r if I answered it adequately. John?

MR. VANDERVEEN: Yeah. I want to add to what has been said. I'm John Vanderveen, incidentally.

I think we are in a changing time. Years ago, I think that it was appropriate to do a lot more regulation than it is now.

Industry has grown significantly in this country. The diversity in the grocery store today, the amount of different products that are there are just overwhelming, in some cases.

You need to just go across the highway and take a look at that new grocery store over there and see the number of products -- the number of produce items in that grocery store, and realize that we're really talking about something that is extraordinarily broad at this point in time.

And this is not only true in Salinas, here, but it's true across the United States. You see grocery stores with this type of produce all year 'round.

What's happening also is that we're downsizing, to some degree, in government. We have even less resources to go out and do what we traditionally did: Go and inspect and sample and do analysis, and so forth.

What we also learned, in reality, is that science tells us that, unless you do enormous amounts of sampling, you are not going to get the true picture.

The real thing that we've learned is that prevention is the best way to go about preventing disease -- to keep these foods safe.

You need to do things that's going to prevent the possibility that microorganisms are there that are harmful, and we're trying to approach it in that manner.

And the third thing that I want to say is the fact that government has come to the realization that partnerships are what's important, that we have to work with industry. We have to -- that's what HACCP is about.

We are not suggesting we are going to get into a HACCP program here, but what we're trying to do is work together, work to have the government, both Federal and State and local governments, work with industry.

If there is a real problem, of course, we're going to have to step in and take regulatory action, but we've got enough regulations on the books to take care of that type of thing.

What we want to do is work with industry and try to make sure that we are providing the right guidance, that everybody is talking the same way, in terms of this is the best that we can do, and then the second, and last point, is:

We're talking about a dynamic situation, something that's changing.

We have new processes coming in, very frequently nowadays, industry changes very, very rapidly, new equipment concepts, new agricultural practices, and what we want to do is be able to keep up with that.

And if you write regulations, it takes a very, very difficult time to try to keep up with technology. So guidance is a way in which we can do this, and I think that's the reason why we're not writing regulations.

MR. GARDINE: And let me just say, I'm very pleased you are here today, and in some of the other meetings, we did not have consumer groups, and I hope you will take this as an opportunity to perhaps engage in debate, if you think it's appropriate.

MR. NELSON: The next question?

MR. ISAACS: My name is Mark Isaacs. I'm from Sun Orchard, and I'm Chairman of the American Fresh Juice Council. This program seems to be on a fairly fast track, and no pun intended, and I was curious if that is based on risk-base analysis that was done, that prompted the President to have a focus like this.

And then, secondly, it's been made very

clear that this is a guide, and I'd like to understand what the FDA's expectations are, as relates to compliance, and how and what will be done to measure this compliance?

MR. GARDINE: All right. Me first.

Regarding fast-truck and fast-track. That is questioned. I -- quite frankly, I cannot answer that. You have to speak to President Clinton's people as to what thoughts were going on, to generate this, but I will say, as a public health official who has spent much of the past two years dealing with Guatemalan raspberries, various other outbreaks, that this is not simply a perceived problem.

It is one that all of us have to try and get our hands around and help prevent for the future.

Whatever the President Clinton's reasons were, I am delighted that he initiated this, because these problems are going to be with us for quite some time, and we cannot blink at them. We should face them head on and try to do what we can to limit them. I think we have a concern.

Our food supply is safe, but there is a concern that things are changing. E. coli 0157:H7 is a terrible thing, and it's a relatively new pathogen. It's not something -- we believe it's not something

that was just -- that we could never detect it before.

We believe that this is a bug generated fairly new -- fairly recently. Because of that, if it happened once, it could happen again. We have to get, as a society, our hands around this. FDA's expectations -- and I think USDA expectations, if Dr. Gomez wants to comment on it, of use of guidance -- I think your question was what exactly were expectations from -- for enforcement?

You can't enforce guidance. You go to a court in front of a judge, he laughs at you and throws you out the door.

We are talking about education, outreach, jawboning, encouraging working with States, working with your trade associations for outreach. We've begun some of these conversations about the best way to do this, but it is very difficult to give you firmer details until we have the final guidance documents.

Very appropriately, for example, if I approach some trade organizations about, you know, do you think it's appropriate for you to work with us on outreach and education on this, they say, Well, let's wait until June or July, when we see a final document that you want us to outreach on, and see if we think

it's worth a damn.

11.

So we have our -- our expectation is that this is going to be an educational effort, and nothing more. And -- but I should say, as strong an educational effort as we can make it.

MR. NELSON: Next question? No? Go ahead.

MR. STEARNS: Yeah. I'm Ken Stearns with Monterey Mushrooms. Just a couple of comments. It's apparent that the Federal government would like some help with composting operations. I suggest you go to the mushroom industry. We're compost experts and probably, like, American Mushroom Institute would be very happy to help you.

MR. GARDINE: Do you know personally whether they have specific guidance available that they share their members?

MR. STEARNS: Yeah, there is quite a bit of documentation out there.

Secondly, I see there are no OSHA representatives here, because a lot of things -- you are talking about toilet facilities, it's not "should have" it available, but it's a "must."

And finally, I think, in this type of forum, it would also be good to talk a little bit more about the CFR 21-110, you know, the -- for food processors, because a lot of agricultural -- you know

processors, they don't know to follow these regulations, and I think this type of format is very important.

2.5

MR. GARDINE: In response, I, first of all want to thank you for the comment about the American Mushroom Institute. And I have a hunch our drafters will be contacting them relatively shortly.

I did point out, at, I think, the beginning that OSHA was involved in this, but it is a guidance document, and so we use OSHA, but remember, we reference all the time that it does not in any way eliminate the need to comply with existing Federal and State laws.

As for 21-110, thanks for the advice, our thoughts were you didn't want to hear from us any more than necessary. We were here to hear from you. We tagged out an hour of 21-110, but that kind of detracts from what we want -- from what we, as the drafters of this guidance, want from this meeting. We don't want to talk to you, as delightful as that is, but we want to hear from you about what we are considering here, but thanks for the advice. Perhaps we will in the future.

MR. NELSON: Next question? No questions? Dr. Breitmeyer?

MR. BREITMEYER: Richard Breitmeyer,

Department of Food and Agriculture. I would like to clarify a concern for selecting specific commodities. Our concern is that commodities not be selected for the wrong reasons.

It seemed arbitrary, in earlier discussions, to throw out that four commodities should be selected for '98 without any criteria for selecting those.

We think it's very appropriate to address these recommended guidelines for all commodities, not waiting for a problem to occur, but to put prevention practices in place to prevent all commodities that can become contaminated.

If a certain commodity is identified with appropriate scientific research with appropriate risk assessment as truly a risk in a ready-to-eat form, then it probably would be very appropriate to recommend specific guidelines, but make sure we have the right science and right risk assessment to make that decision.

MR. NELSON: Next question? Don't be bashful. Yes.

DR. ZAWEL: I am Stacey Zawel with the United Fresh Fruit and Vegetable Association.

Tom, your comment, just previous to this, regarding the -- how do you regulate using this

guidance, and that in fact you can't enforce a guidance, and that in a court of law, you would be laughed out of the room.

And, as a matter of fact, that isn't the case at all, and that's a big concern on behalf of the industry, not only for what you are doing, but for a lot of the volunteer efforts that have been undertaken.

As a matter of fact, in the industry-wide guidance to reduce microbiological issues, which you have seen, there is a statement that, "We do need increased information and new technologies to permit a better understanding of." --

(The spokesperson was requested to read more slowly.)

"This document is not intended to establish and should not be construed as establishing industry standards imposing any legal obligation or providing any legal benefit," because, in a court of law, much to the contrary, you will be required to follow what the industry thinks are the best practices, and if you are not, you could in fact be found in violation of what your people think is the best idea.

And so it's a great concern for the industry in providing documentation.

However, we obviously think it's important, and it's going to be the same thing for this.

MR. GARDINE: Stacey, just for a moment, just for clarification, I realize that perhaps in a civil lawsuit someone could take your guidance, our guidance or any guidance document, and bring it into court.

But I think the point I was trying to make is that, as a traditional regulatory agency, with guidance, FDA is not going to be out on the farm saying, "Oop, you didn't do this, you didn't do that, therefore you know we're going to enjoin you with forced compliance."

We would not do that in a guidance. In that case, we would very likely be laughed out of court.

DR. ZAWEL: Yeah, I think that, you know, we've talked about this, or this has come up along the way.

MR. GARDINE: I just want to add, I do believe that was the intent of the gentleman's question.

"What is FDA going to do?"

DR. ZAWEL: Right, but it's also really important, and we've seen it in some other interests, where FDA has in fact enforced guidance and this

happened in the refrigeration labeling, and therefore, while that is the intention of guidance, I think that you, as the Federal FDA, and we've talked about this, need to be very, very careful in educating all of the local inspectors as to the definition of guidance versus regulation, and what that means and what they do.

MR. NELSON: Next question? Anyone else?

Okay. If we don't have any more questions -- do you have a question back there?

Yes.

MS. GERREN: Donna Gerren with Boskovich Farms. There's been, you know, comments on not putting research together because there is not science to back it up, and not appropriate science to back it up.

Well, who is going to do the appropriate science and who is going to evaluate its appropriateness? I mean, whose responsibility is it, and who is going to fund that type of research?

MR. VANDERVEEN: Okay. There is a component that is going to be looking at research. The research program is being put together at -- or, the agenda, I should say, is being put together at this time, and in the President's initiative, research is part of that overall component.

You are going to hear from Dr. Gomez, in a little bit, about USDA's efforts and we expect all research organizations to be encouraged to look at the problems that we have.

I recognize that probably some of the answers we need may go beyond what is typically agricultural research. Some of it is going to have to be dealt with by such organizations as the National Institute on Allergy and Infectious Disease, for example.

What is the level of organism that would cause an infection? We -- an infectious dose of certain of these organisms may be very, very low, especially E. coli and 0157:H7 is expected to be exquisitely low, even a few organisms, perhaps where another organism may not be that low.

That type of data we are going to have to wait for, as time goes on, and keep the pathogen level as low as we can possibly can, but may indeed, as Tom has pointed out many times in his talk this morning, is the fact that we are going to minimize, not totally result in a abolition of these organisms in the environment.

So, I hope that answers your question. I can't say who is going to do precisely this. We hope that industry would join with us and fund appropriate

activities that they could accomplish better than perhaps government can, and we hope that even the agricultural community itself would look favorable on cooperating with their State, universities and institutions that are associated with research in cooperating with them as -- in a way to make their operations available for collectible data, and testing new concepts to see if indeed it might not improve agricultural practices to lower the risk of these pathogens being in the food supply.

The only way this is going to get done is if we all work together at it, and we're going to look very heavily toward agriculture to be the big player, the U.S. Department of Agriculture, that is, to be the big player. But I think State Universities and industrial research organizations also have to play a role.

MR. NELSON: Yes?

DR. HADDON: I'm Dr. Bill Haddon. I'm the research leader for Food, Safety and Health at the U.S. Department of Agriculture's Research Laboratory, the Western Regional Research Center that's in Albany, California.

I wanted to address the previous question from Donna, and to say that our laboratory has had an approximate 50-year history with working with the

fruit and vegetable industry in California.

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Two years ago, in our Food, Safety and Health Program, we recognized that pathogen control in fruits and vegetables would be important, and we are in the process of integrating that very strongly into our program.

We're, of course, very excited as scientists about some of the research opportunities, but what we feel is a very strong need to work with the industry, particularly here in California.

So, again, my name is Dr. Bill Haddon,
Western Regional Research Center of the Department of
Agriculture in Albany, California, across from
San Francisco, and we are certainly actively seeking
research partnerships in this area.

Thank you.

MR. NELSON: Next question? Well, if you have no other questions right now, I'd like to bring Dr. Rick Gomez from USDA to give his presentation.

DR. GOMEZ: Good morning. And thank you for being here. It's great to see so many people.

I've been asked to explain, more or less, the role of USDA in this initiative on fresh fruits and vegetables.

USDA is such a big entity that it has many, many roles it can play and will play in this

initiative, but let me start with the title of the initiative, which says "Foreign and Domestic."

And we do have programs at USDA that are foreign and some that are domestic, and let me bring you some of the foreign ones. Before an agricultural service, a promoter of U.S. agriculture in other nations, they have a role to play in this initiative.

They, through their promotional activities, through their international cooperation and development activities, and in cooperation with the U.S. aid programs, can influence some of the agricultural practices in other areas.

So they have a fairly strong outreach capability, and we hope to bring that along to other lands.

On the domestic side, and one that plays a pivotal role in protecting American Agriculture, is the Animal and Plant Health Inspection Service, and they have point-of-entry inspection capabilities, and do, throughout the U.S. border.

They can also play a role in this through outreach because they touch other areas -- other countries.

On the domestic side and the agency I represent, by the way, the -- is the Cooperative State Research Education and Extension Service, which

is a union of both the land grant and agricultural experimentation system and the extension system throughout the United States.

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We, in that capacity are the extramural arm of the USDA in outreach and research activities.

You've heard the gentleman from ARS,
Agriculture Research Service. They are the
intramural research arm of the USDA, and they also
serve some of the regulatory activities of USDA.

I know that ARS has redirected resources to address this initiative. My agency is also redirecting some resources to address this issue.

There was a question of who is going to do the research?

Well, I think ARS is partly going to do the research on agriculture practices. Our system is going to do some of the research on agriculture practices through either redirection or through new monies being appropriated under the fiscal year '99 budget.

We have a blanket request, which is at the Office of Management and Budget, at this time, for FY '99, and there will be similar requests for years thereafter.

But let me tell you the way we operate, who we are, my agency. As I said, we are the union or

the merging of Experiment Station and Extension Services.

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We are the Federal partner of that system, and we fund only about 20 percent of the total monies being spent on research and extension throughout the U.S., and our budget is -- I think it's upwards of one billion dollars.

So you can imagine the magnitude of the ag research and extension activities.

The reason that we are both research and extension is not by chance.

It is a very logical union.

We are a feedback mechanism within ourselves. Extension reaches down to the local level, brings to research the needs and wants of the producers, that researchers do the research required, doing the priority set at the local regional multi-state and national levels, and extension delivers these programs to the local producer.

So it's a complete feedback mechanism, and that is one of the things that we need to try to accomplish in this initiative.

We need to get industry involved, and have it be a partner at the table, the same as FDA is, and the same as USDA is, because industry can and will, through its educational activities, help in promoting

the safe production of fruits and vegetables.

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So I think that the voluntary guidelines that are going to be the product of this group, working with industry, working with FDA and USDA, working with the land grant universities, and by the way, let me see if I can remember how many of those there are.

There are over 100 in the U.S., including Puerto Rico and the Pacific islands. So there are quite a few land grant institutions around.

We are the research outreach and educational arm of the United States Department of Agriculture.

My agency, the Agricultural Research
Service, the Economic Research Service, are in effect
under one mission area in the department.

We are separate from the others, such as the Food and Safety and Inspection service, but we do work across mission areas, obviously. We need to work across all areas here to achieve a safer product for the U.S. consumer.

One of the things that we also need to include, at least in our thoughts, is that it's not only agricultural producers that need to be involved in this. It's the whole gamut. I know Tom has said it before, but we need to try to educate the whole

spectrum, from the foreign, to the consumer, to the person that eats the stuff.

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So we need that. And some of our agencies such as the one I -- I'm with -- have the capabilities, but we need to bring others -- others in. We need to bring, within USDA, for example, some of the food-stamp-type activities. We need to bring those in to really make this work.

If you just pinpoint one area, the production area and leave the other ones untouched, it won't work. It will require all of us to be involved in this.

I will be around, but USDA is always around somewhere. If you have some questions, I'll be more than glad to answer them.

As we go to lunch, please don't forget to eat your vegies, okay? They're safe.

MR. GARDINE: Or fruit salad.

DR. GOMEZ: Or fruit salad.

MR. NELSON: Do you have any questions for Dr. Gomez right now? What a quiet audience here. Two things before I let you go to lunch. All the presenters, please be seated up here so we can get started when you come back from lunch.

Please be back here at quarter to 1:00. You will be free for one hour. Okay?

(A luncheon recess was taken between 11:45 and 12:56 p.m.)

MR. NELSON: All right. Let's get started. Would everyone come in, please, and be seated?

Each person will introduce himself and continue on. Tom Gardine will also sit up here to answer any questions you may have. Dave?

MR. RIGGS: Okay. My name is David Riggs.

I am President of the California Strawberry

Commission. I appreciate the opportunity to comment today on the proposal to develop good agricultural practice guidelines.

I have been asked to kick off the discussion on behalf of industry, and I want to begin by saying that our comments today should not be in any way construed to mean that we are opposed to any efforts to enhance the quality of food safety in American Agriculture. I think many of us are very active in developing programs specific to our industries, in trying to develop guidelines that are useful and applicable in the field.

In fact, as I listen to Dr. Gardine's presentation, I said I've heard that speech before. In fact I've given that speech before. Ray Nelson has heard me give that speech before.

Well, I think, as you also correctly

pointed out, the devil is in the details, and there are some areas where we do have some concerns, and we appreciate the opportunity to express some of our concerns in this meeting.

The California strawberry industry is very acutely aware of the food safety issue. Our industry has suffered through two food safety scares in the last two years, neither of which was of our making. It has been referred to already in this meeting.

In 1996, Cyclospora outbreaks in several cities in the U.S. and Canada were initially attributed to California strawberries, and ultimately it was determined that the most likely source of the illnesses was raspberries from Guatemala, but before consumers got the correct information, they quite understandably avoided the purchasing of strawberries, and the effect upon our farmers was devastating.

In a four-week period our industry lost between 20 and 40 million dollars. We estimate for the Counties of Santa Cruz and Monterey County, the loss was about \$2,000 per acre. Many farmers did not survive.

Our acreage declined 15 percent in the northern districts in 1996 to 1997, which equates to a loss of 5,000 agricultural jobs, and that's a very

substantial economic impact on agricultural communities like Santa Maria and Watsonville.

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I think that's particularly important because, in our view, the real cause of these losses was not Cyclospora. It was haste, carelessness, inaccuracy and a lack of adequate science.

Some public health officials rushed to conclusions, and media reports inflamed the situation and there was clearly a dearth of scientific information about the Cyclospora organism.

I want to add that the Cyclospora case shows that the public is ill-served by inaccuracy. When the Houston Health Department told people not to consume California strawberries, many restaurants immediately substituted Guatemala raspberries.

Again, in April of this year, children in Calhoun County, Michigan, became ill apparently from the consuming of frozen strawberries that were grown in Mexico last year and processed by a plant in California.

The Hepatitis A infections were clearly not related to fresh strawberries, nor were they ever associated with strawberries grown in California. But again, the careless use of words, such as headlines reading, "Tainted berries," confuse and alarmed consumers, and again it was the California

farmer who suffered.

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And, again, losses in the tens of millions of dollars affected farmers and farm workers in communities where strawberries are grown.

Now, in many ways, in both of these situations, it was FDA, CDC and our State health agencies that added rationality to these situations by taking the time to seek out more facts by demanding more information, and by doing all they could to ensure clear communication reached the media.

So the agency's responsibilities and credibility in this area is clear, and it's very important to public health.

But frankly, we are concerned that the haste with which these guidelines are being developed, with which FDA appears to be moving and developing these guidelines, may put the agency in danger of falling into some of the same traps that afflicted the Cyclospora and Hepatitis incidents.

Therefore, we urge you, as you prepare these guidelines, to take the time necessary to develop the guidelines properly, be careful whether you are in communication, and ensure that there is an adequate scientific foundation for the recommendations that you make.

Most importantly, you should be cognizant of the substantial infrastructure of State and Federal regulation in place to protect the consumer, and many industries, including the strawberry industry, have taken progressive steps to further ensure the safety of our products.

Now, we appreciate the acknowledgment that we've heard so far today, that there is a substantial structure of regulation and law which is already in place in this area, but I have to say that, in some of the previous rhetoric we've heard, we've been concerned that this acknowledgment has been lacking.

While neither the Cyclospora nor the Hepatitis incidents were related to strawberry production, we clearly learned firsthand how intensely the consumer feels about food safety issues, and we tried to respond proactively.

In the midst of the Cyclospora incident, we established a Cyclospora research panel, and the strawberry industry funded about six of the leading industries in the United States and Canada to do substantial research on improved detection, improved treatment and improved basic understanding of the knowledge of Cyclospora.

Again, Cyclospora was not our problem, but we felt this was research that needed to be done and

we came to the plate with the money and with research grants to make sure that research was conducted.

Secondly, we proactively began work in mid-1996 on developing a Quality Assurance Program to add that extra measure of safety to demonstrate our commitment to producing a safe product for the consumer.

We worked proactively with the California Departments of Health Services, with Food and Agriculture, with FDA and the University of California to develop a comprehensive Quality Assurance Program.

I think there are two points that I would like you to note from our experience in developing this program.

First, it's taken us about 18 months of concentrated work, on a crop that we know very well, to learn all we needed to learn to ensure that our program meets or exceeds all legal and regulatory requirements, is doable in the field, and is based on solid science.

We are concerned that FDA is trying to do the same job for all commodities throughout the United States in about a third of the time without the in-depth knowledge of production and legal issues that we began with.

Second, as which noted before, there is a substantial framework of State and Federal regulation, as well as industry standards, in place to ensure that agriculture provides a safe product for the consumer.

And to illustrate that, most of our Quality Assurance Program is a matter of ensuring and documenting all the steps the farmer takes to be in compliance with California's stringent regulations on worker safety, field sanitation and pesticide usage.

Because this framework exists, we think the haste with which FDA is approaching this task is unwarranted. There is time to make sure that it's done properly, and as we said before, inaccurate information or bad decisions can create a public health risk.

I say -- we would say the first step that we would recommend is to take the time necessary to understand current farming practices, to spend more time in the field, get to know what's already being done, and establish the scientific foundation for these regulations.

In summary, I would like to leave you with four main points:

First of all, we would urge you to take the time and make the effort to understand farming

systems as you write these guidelines.

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You, and those who are drafting this document, need to get into the fields during the harvest season, during the production process to understand farming systems.

Number 2, acknowledge and understand existing State and Federal laws and regulations relevant to food safety and agricultural practices, learn more about what specific industries are already doing and have already learned in the process.

Number 3, and this is perhaps my most important point, as you move forward with this, you must do so on a generic basis.

We are very adamant in our feeling that there is little to gain and a great deal of risk to the economic well-being of farmers, communities and farm workers if you identify specific commodities for special attention.

However you devise your criteria, there will be a potentially ominous spectre hanging over any crop that you identify for special treatment.

And, finally, you need to ensure that whatever recommendations are part of these guidelines are based on sound science and can be realistically and legally implemented in American farming.

Again, the California strawberry industry

has paid a dear price for the education that we've received on food safety, microbial contamination and the intensity of the consumers' concern about food safety.

We've learned a lot in the process of developing our Quality Assurance Program. We've worked closely with both our State and Federal agencies in developing that program, and we've encouraged our national and State associations to be a source of information for FDA in this process.

I would like to conclude by saying, on behalf of the strawberry industry, that we'd be happy to share what we have learned, facilitate field tours or provide additional insights that might be valuable in this process.

Thank you.

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MR. GARDINE: Thank you.

MR. NELSON: I'd like to introduce Matt
McInerney, Senior Vice President of the Western
Growers Association, which also represents farmers in
California and Arizona.

MR. McINERNEY: Thank you, Dave, and thank you for the opportunity to present comments on behalf of the Western Growers Association on the proposed agricultural practices.

As I look out in the audience, many are

members of the Western Growers, but perhaps for those who are not familiar with us, the Western Growers Association is a trade association representing growers, packers, shippers and processors of fresh produce in California and Arizona.

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We represent about 90 percent of the fresh produce grown, and it equates to over half of the fresh produce consumed domestically.

Western Growers and its members are extremely proud that our industry contributes to the health of the American consumers by providing to them nutritious and safe produce.

It is a well-documented fact that the benefits of eating fresh fruits and vegetables far outweigh any risk of becoming ill due to a Cyclospora out-break.

In fact, it has been suggested you may suffer greater threats or risks by not regularly consuming a minimum of five servings of fresh fruits and vegetables daily.

Based on reports gleaned from government statistics, they tell us that about three percent of all fresh produce, food-borne outbreaks can be traced back to originating in the field, packing house, processing and post-harvest activities.

In our personal experiences and in

following the current management theories, regulators should focus most of their remedial measures on those post-harvesting processing activities that seem to cause the largest reported problems.

Therefore, before FDA proceeds too quickly to concentrate its efforts exclusively on the fresh produce industry, FDA should keep in mind this low statistical number of three percent when it moves forward.

As many of you might know, Western Growers has been aggressively engaged in the food safety issue for the past year and a half.

We are very proud of the efforts we have accomplished today, and will continue in the future on the food safety issue.

In fact the partnership with the International Fresh Fruit and Cut Produce Association, along with the California and Arizona Fresh Produce Industry has developed, as I think Ray Nelson showed, the Voluntary Food Safety Guidelines for the fresh produce industry.

In partnership with the produce industry and government regulators, which is a key component to the production of our document over the past year, we've learned a lot about food safety, how to write guidelines and how to communicate food safety

principles to our growers, shipper and processor members.

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Our comments today reflect those experiences that we have gained through that process.

First, we strongly encourage the President and the Food and Drug Administration to slow the process down.

We frankly are concerned and don't understand the need to move so quickly with these FDA good agricultural practices.

For example, our process took us, in the final drafting stages of the document, eight months to develop the draft guidelines, and that was with considerable input from the industry, growers, shippers, packers, processors and most importantly, from government regulators.

We are concerned that, in FDA's inexplicable haste, the FDA could develop GAPs that could be one, unnecessary, and potentially redundant to current State and Federal law.

Perhaps our experiences might have been unique. The guidelines that were developed with IFPA and WGA were written by those growers, packers shippers and processors who live with them day-in and day-out, and who deal with food safety on a daily basis. They have field, cooling, packing, processing

and transportation experience.

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Further, we have the input in our document from a panel of scientists familiar with food safety issues.

Finally, the constant interaction with regulatory bodies provided a great deal of validation for the final document of our Food Safety Guidelines.

It is with the greatest of respect to the panel and to FDA that FDA has not had the same on-ground interaction which WGA believes is critical in developing meaningful GAPs.

For this reason, we respectfully suggest that the President, and through him, the FDA, slow the process down until FDA has had an opportunity to visit and interact in fields, packing houses and processing plants, and to work with local growers, packers and shippers, as well as processors, and our State agricultural health officials to develop GAPs.

Secondly, we strongly encourage FDA not to develop crop-specific GAPs. If the FDA identifies specific commodities for which specific GAPs need to be developed, government will potentially taint these commodities in the eyes of consumers.

In other words, you will totally undermine the confidence of consumers in specific commodities, with no scientific basis, which can only serve to

cause additional significant economic damage to particular commodities.

2.2

Again, keep in mind that the three percent statistic is an extremely important issue to keep in mind as the GAPs move forward.

Again, we are extremely proud that the fresh produce industry is continuing to minimize microbial contamination.

In California and Arizona, we are actively engaged in addressing food safety issues, and have been for some time. Before focusing all or part of its effort on field to -- before focusing all or a large part of its efforts on field to packing to processing operations, which are a minor contributor to food safety problems, we must have equity, parody and good management practices by FDA first.

By focusing primarily on produce agriculture, the segment of the fresh produce industry, FDA is in effect singling out, or in effect punishing that segment of the industry which is doing the most to move forward the food safety issue and reduce microbial contamination.

Therefore, again, we emphasize the process should be slowed down and the focus on the production side of the fresh produce industry should be re-examined.

I'd like to emphasize that we are not opposed to guidelines. As I indicated, we developed our guidelines and currently have an outreach education program that is actively involved with our members.

We developed our own guidelines. However, we developed them locally. They were written by industry growers, packers, shippers and processors, who are very capable and were assisted by scientific expertise in government cooperation and partnership.

We believe that our approach, a deliberate and pragmatic process, with a strong educational component, has resulted in a comprehensive, but ever-evolving document that will change as time and science and techniques evolve.

We suggest that the potential of the WGA-IFPA Voluntary Food Safety Guidelines be used as a model that FDA could consider.

Again, please slow down your effort, do not develop specific crop GAPs, and recognize that the fresh produce industry has been, is, and will continue to be, actively engaged in the food safety matters.

Those are my brief comments today, and I appreciate the opportunity.

I would like now to provide an introduction

to Leslie Caviglia, Vice President Member Services with the California Citrus Mutual.

MS. CAVIGLIA: Thank you, Matt. And I want to express the same sentiments that we welcome the opportunity to provide comments today.

I am here representing California Citrus
Mutual, which is a trade association for the citrus
industry. We represent growers throughout the State.

And I'm also here speaking as a farmer. My husband and I are citrus growers in the San Joaquin Valley, and kind of the typical small farmer that you would think of.

And I'm here as a very proud, but have frustrated, farmer with this process.

We in citrus are very proud of the product that we produce. It's very healthy, it's very wholesome. It's a unique product. It's got a thick skin around it.

We already use low volume irrigation. We harvest with growers already. We don't utilize fruit that's dropped on the ground. Those are already established practices that we have.

As a result, we already have an excellent food safety history in our industry. We know of no problems that have ever resulted from microbial contamination. We're very proud of that.

Nonetheless, we still, as an industry, took the initiative. California Citrus Mutual, working in conjunction with the California Citrus Quality Council, which is -- works in conjunction with our research board to develop our own good ag practices.

We work with researchers and scientists that are familiar with our industry. We worked with industry experts to develop our own document. We utilized that excellent knowledge and excellent history that we already have in producing a safe product, and we are taking the responsibility for continuing the outreach and the education to reach our growers and our packers and shippers with that information.

We also know that we are going to continually review and to adapt that document to meet the changes that are continually going on in our industry, and we think that we are best situated to do that, again because of the excellent history that we have.

So I come frustrated now to hear that government thinks they need to come tell us how to do something that we already believe, and have a history of knowing, that we do well.

I do believe that the document that has been prepared is too much of a cookie-cutter document

that does not take into account the differences in growing regions and the variations between States and the government regulations that are already in place.

I also believe that some of the recommendations are impractical. An example that I would use, a specific one, would be that it takes my husband and I about three-acre feet of water to grow an acre of citrus each year.

On good years like this one, a third of that is going to come from rainfall. Another third is going to come from the ground water, and a third will come from the Federal Water Project.

To hear now that we should be testing our wells to test the quality of that water, and yet we have nothing to reflect back on what would be a satisfactory quality level for the water, is frustrating.

It's testing, and for what purposes?

Secondly, with regards to the Federal Water Project, water that travels for literally hundreds of miles through the open canals, and so on, all of a sudden now we are responsible for the quality of that water.

I have visions now of the Feds putting up fences along the entire canal to keep out the humans and the rodents and other wildlife that are not

supposed to become involved with the water.

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It just seems impractical, and, again, does not reflect the local conditions.

One part of our frustration also comes from the implication that we wouldn't do this just because it's the right thing to do, but, even more importantly, it's a market-driven situation for us.

We've got to produce a safe product. We've certainly seen, time and time again, that, when there is a problem, whether it be real or imagined, the entire produce industry receives a black eye.

The specific commodity that it involved, then, has great economic damage done to it. It's in our best interests to be doing this, and doing it correctly, and that's what is driving us.

We, too, as Matt indicated, are frustrated that the emphasis seems to be on the growing end where the risk seems to be the lowest, that three percent of the food-borne illnesses, and that more of the emphasis is not being put -- or isn't even beginning with the retail food service and home practices that are really critical to the food safety issues.

Our final frustration, at least on my list, comes from the fact that this is being touted as guidance, and we have, time and time again, as

farmers in California, seen guidance and voluntary things turn around and very quickly become regulations.

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We are skeptical, and that is the kind word, I think, on behalf of our growers, to say that these will not in a very short time become regulations that will be costly and not necessary -- most importantly, not necessary.

We have some questions about whether the full ramifications of these guidelines have been studied, and if in fact they will, because we think it is important that it be considered.

How will guidelines such as these, that could easily become regulations, affect the market supply of the healthy produce that we know needs to be provided throughout our country, and at an economical level so that it can be afforded by all segments of our consumer base?

What economics effects could these actions have on the viability of growers throughout the country?

Is it going to become so cost-prohibitive that in fact many of our smaller growers are run out of business?

How will it affect overseas trading.

Day-in and day-out, the President of

California Citrus Quality Council is here, we deal with trade barriers in other countries. Whether this be perceived as a false trade barrier, or an excuse for other countries to keep us out of their trading areas, are real issues that we think need to be studied before this goes further.

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We believe that this process is flawed, most importantly because it is moving so quickly.

We, too, took months to develop our own document, using our industry experts, using the people who are very familiar with our product, and it took us several months to do, and still this one is being turned over in just a very -- seemingly short period of time.

We also question whether the research and practical experience is in place to be developing these types of documents.

Yesterday our -- the President of our organization was in Washington, D.C., and he was told by one of our Congressmen that our Congressman had been assured that representatives from FDA would be in the San Joaquin Valley in January to conduct field tours, and I think that is laudable, and we look forward, and hopefully, today, we can perhaps receive a date that you will be coming to the San Joaquin Valley.

From a very selfish perspective, that's great, but I think there must be much more exploration and research done before this goes forward.

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Please don't get me wrong. California
Citrus Mutual does support the concept of food
safety, and we believe that our practices that we
already have in place and the steps that we've taken,
speak for themselves.

Good ag practices, good manufacturing practices are important, and again our actions speak louder than any words, but as you go ahead and go forward to make your 90-day report to the President, we are adamant that you request that this process be slowed down so that it can be -- not just done, but done correctly, that it not be commodity-specific. That is just not necessary. That it be based only on sound and proven research, which is based on good field research and not test-tube research.

And that it be taken only after much more study and an understanding of the entire industry is undertaken by the decision-makers that are involved in this process.

Again, we support good food safety and good practices, but we believe that is best left in the hands of those who are practicing it.

I'd like to now introduce Dick Nutter, who is the Ag Commissioner of what is known as the "salad bowl of the world," Monterey County.

MR. NUTTER: Thank you, Leslie. That was my line.

I'd like to welcome you here to Monterey County, and on behalf of County Agricultural Commissioners throughout the State.

California is unique, and it was brought up during the testimony here earlier, that you need to look at reasonable commodity diversity in coming up with your decisions.

California is unique, not only because of our climatical conditions and our ability to grow a lot of crops, we're unique in the fact that we have this system called the "County Agricultural Commissioner System."

There is a County Ag Commissioner in each County, each of the 58 counties in California, and we are appointed by the Board of Supervisors after recommendations by the Director of Pesticide Regulations and the Secretary of Agriculture, at the State level.

So we work administratively under those State officials, so we've heard a lot this morning about the Federal and the State officials that are

available, but I'm here to tell you that, in California, we have some other local officials that are able and willing to a part in this whole process.

We are involved with every grower in the County. We're on every piece of property in the County. We know the -- the crops, the diversity, the cultural practices. We are a major resource, when it comes to dealing with County issues.

Just involved with -- as a result of the Cyclospora issue and E. coli issues, the guidelines, the volunteer guidelines that were developed by California agricultural industry, members here recently started right here in this County, where it was a partnership between some State officials and members of my staff, to organize the first meetings, along with Ray Nelson, and others in the FDA, to say, "We've got a problem here. What are we going to do about it?"

So I think that the resource that we have here in Monterey County is the Agricultural Commissioner's ability to work with University Extension people, with the Federal and State organizations, make this an opportunity to take the message that we're going to try to get out and get it to all people.

Looking at agriculture here in Monterey County, we're a two-billion-dollar gross-value industry.

2.4

In fact, we rank Number 4 in total value in the nation, and the leading vegetable crop-producing County in the nation.

What we've seen over the last -- the last few years, you know, if you want to take it in time frames of decades, where, how did we get to the position where we are right now?

Looking back 20 years ago, we produced about 55- or 60,000 in acres of head lettuce, and today we're producing about 70 to 75.

We were producing 3,000 acres of leaf lettuce, and last year there were 35,000 acres of leaf lettuce. Broccoli has gone from about 20- to 25,000 acres to 55- to 60,000 acres.

This has all been driven by consumer demand and, obviously, there has been an effort by the industry to support the 5-a-day program and others, but I think that consumers, in general, are more health-conscious than they have been in the past, and they are really demanding this at this time.

Part of that leaf lettuce has gone to 18 to 20 romaine alone. You can see it in supermarkets where they have made shelf space just for salad

products. So it's been a major change, and it hasn't come about overnight, although it seems like those packaged products just appeared there.

But it's been over these many years where it's been trial and error with people dealing from all the processes: Food safety issues, from packaging, transportation, from marketing.

All those sorts of things are in place to develop this new technology and be able to provide these products to our consumers, not only here, but throughout the United States.

We look at regional and commodity differences. I think this is really important because I've seen, over the years, when -- particularly with EPA making decisions on pesticides, where they will sit around a table back in Washington and say, "Oh, what's an artichoke? I wonder, how does that grow?"

Maybe we can -- you know, push this type of approach. When they don't understand what the commodity is, how it grows, or much about it, so I think that it is important following up on the FDA's tour in California. I think that is really significant that we look at regional and commodity differences.

The other issues about compost and manure,

when you look at about 60 days and 120 days, some of our crops from seed to harvest are 45, 50, 60, 70 days.

So we really need to take those types of things into consideration before you would make a flat prohibition against a specific time frame. It would have to be some qualifications that would come into place there.

I think, in general, we have been able to form some good working partnerships with our industry, and with our State and Federal partners that have been beneficial for the industry, and so I would just like to again reiterate that we have a mechanism here to provide information to the agricultural community on an individual basis, and so I'm offering that as part of our efforts in cooperation.

And I think that this County agricultural system allows us to deal with State and other issues and mold them to the County -- the County differences.

You don't want to implement the same type of conditions on -- that you have for cotton into a lettuce crop, or some other type of annual crop or short-growing season crop.

So I think that the next speaker, Dave

Bolster, from El Dorado County, epitomizes, you know, what can happen when a County Agricultural Commissioner perceives that there is a need in the community, and sets out to address that issue.

So, Dave?

1.4

2.2

MR. BOLSTER: Thank you, Dick, and I would like to provide Bill Snodgrass with some kudos for his involvement. Bill Snodgrass is the El Dorado County Agricultural Commissioner.

Bill Snodgrass, back in March of this year, when Stu Richardson and DHS convened a State-wide meeting of the apple growers in California, Bill Snodgrass took a leadership role and he took a leadership role in our industry, which, at times, is unconventional for Agricultural Commissioners, in terms of the degree of risk, that Bill took in terms of putting himself out on the line with his industry.

so I think Bill deserves a great deal of credit as our Agricultural Commissioner. A little bit of background on the Apple Hill Growers.

The Apple Hill Growers are a collection of approximately 50 fruit growers, wineries, Christmas tree growers in El Dorado County.

We are a small -- we are a group of growers in a small area, probably 15 to 20 square miles, and

we, in terms of the development of a Quality
Assurance Program, are very fortunate in that we had
a relatively small group of seven processors that
have known each other for a long time, and so we were
in a favorable condition, in a position to be able to
put together a Quality Assurance Program.

The Apple Hill GAP is a collaborative effort between industry, government and the scientific community.

2.0

FDA, DHS, University of California and, of course, our industry, worked together to create the Apple Hill Quality Assurance Program. The Apple Hill QAP is a comprehensive, integrated program for voluntary guidelines for apple production and cider processing that enhance the safety and quality of unpasteurized apple juice.

When we say that, we're talking about addressing those critical points from bloom to bottle, from that first cultural practice in the field in the winter time, and in the springtime, through the final distribution of the product to the customer, to the consumer.

So, what we have done is address, from the basis of science, address all those steps in that process, to ensure that we have reduced the risk of microbial contamination of that product.

I would like to thank some people in the room today, Dr. Linda Harris at UC Davis, Cooperative Extension Service, providing a great deal of scientific background for our program, Stu Richardson and Jim Waddell from DHA.

So I have to tell you that, when the industry gathered in Sacramento back in March, when Stu got up to speak and it became evident that the approach from DHS was that of a -- an industry-government partnership to solve a problem, I have to tell you that, generally speaking, the industry was fairly shocked at this approach, because that has not been the model traditionally, historically, and I think the Apple Hill QAP is a demonstration of what this model and this approach can achieve.

You know, I think the critical aspect of this notion of government-industry partnership is, that it is so-called -- it's a so-called bottom-up approach, where it is based from the industry, from the people out on the field practicing their trade, and, of course, maybe some of the people in the industry would call that a top-down approach, with the government on the other side, but there is a sense of ownership amongst the people who have to execute these programs, these Quality Assurance

Programs.

They are the people in the trenches out in the field, doing the work, executing the program, and so, without that sense of ownership, I don't think you would have the same effect that you have seen with our Apple Hill program, the Quality Assurance Program, as if it were a simple regulation.

With the top-down approach, where from Washington, we have to pay attention to regulatorer edict, there is no sense of ownership amongst the people who will conduct that program.

So I really think that the notion of a sense of ownership is really critical.

In terms of the development of the QAP and the time frame, Stu convened the meeting back in March. At that time Bill Snodgrass and the industry up there proposed a tree-pick program, and from that humble beginning, our group of processors began the process of putting together, with the DHS and FDA, a Quality Assurance Program that is up and running, and has been fully implemented this last season.

And that perhaps is a distinction from some other QA programs across the country. We already have basically another year or another season under our belt. We have a program that has been fully implemented that has a compliance and verification

element in it. We've already exposed ourselves to our own compliance and verification element by third-party inspectors.

2.5

So we've had an opportunity to witness the full process from start to finish, from the development of a QAP to implementation, and to the final aspect of compliance and verification with that program.

So I think we have some decent experiences in a very practical and real-world sense that we can offer FDA.

Basically, there are six elements to our program, which are guidelines, of course. The administrative guidelines, production guidelines, and I would like to reiterate, one of the themes that we've heard so far, in terms of how we address the commodities, whether it be from the standpoint of looking at it from across the country or by region, one of our observations in developing our QAP was that this QAP was specific to our area, and we recognize that there are different practices and there are different conditions which affect commodities within -- within that commodity.

For example, on the West Coast, we grow very few MacIntosh. On the East Coast, that's a primary variety, so it's very easy for us to say on

the West coast that we are not going to use grounders or drops in our fresh juice, and we recognize that, back east, that potentially may be a problem, and those people may have a greater challenge in that issue. So there are, within commodities, a great variety, in terms of how they are produced and how they are harvested.

2.0

The training guidelines, I think are a really critical element of our program. Linda Harris developed these guidelines, along with Mario Moratorio.

They delivered the training programs and educational programs to our field workers, to our processing plant employees, to the management of our plants, and we are very grateful for their participation and their work in our QAP.

One comment, relative to the objective of the President's initiative, and that is that it seems to be that the objective here is grower awareness and grower training and grower education to prevent microbial contamination of the product.

I think you know we really need to hang our hats on that aspect of grower education, grower training, as opposed to the potential for development of regulation.

I would like to reiterate some of the

comments that we've heard, in terms of the model of government-industry partnership. It works. It has worked for us and I think it can work across the United States, in terms of producing a commodity safely, and I think that we have a concern relative to the approach that's been taken, not only the time frame but, you know, we have a model here in California that has worked, and our concern is that, for some reason, we have deviated from that model.

Although, you know, we credit FDA for utilizing much of the information that was developed here in California, our concern is that we have gone back to the -- you know, the old model of the top-down approach.

So we would like to strongly recommend that we slow down the process and go back to the fundamental notion of asking the people who are going to do the work in the field and manage the process, and deal with them first, and then develop the program.

We think that's absolutely critical.

The time frame, we had seven processors that we worked with, a very intensive effort from March until the middle of August this year, and so we have a very small group of people that worked very hard, for a short period of time, and were able to

pull this off, but you know, I think you have to keep that in perspective.

2.2

When you're looking at, in implementing the GAPs across the United States, is that the time frame is excessively -- I think ambushes it, and it's overly-optimistic to think that you could actually implement and successfully develop GAPs that are bottom up, that are -- that have buy-in from industry in that time frame.

With that, I will introduce Dr. Nagle from Dole Foods. Nancy Nagle.

DR. NAGLE: Thank you. I'm here just representing the Dole Food Company, and I just kind of want to talk a little bit about some of our company's feelings about this process.

Obviously, we at Dole are big supporters of food safety, and we also, however, believe that the vast majority of fruits and vegetables consumed in this country are perfectly safe.

We can't forget the 5-a-day message. We've spent a lot of money as a company and industry in encouraging the increase in consumption of fruits and vegetables, and the good news is this message has been successful. We have now increased average adult consumption of fruits and vegetables up to four servings a day, up from two and a half when the

program started.

So we should all applaud ourselves for that factor, and are pleased at the progress we are making on the nutritional front, actually following models set forth as good manufacturing practices, and also we recommend the use of the background documentation that was developed by Western Growers and IFPA, as well as the United Fresh Fruit and Vegetable Association.

There is a concern. We want to make sure that any specific recommendations are based upon sound science and respond to actual risk.

When we looked at the Western Growers, and IFPA documents, and the guidelines that we worked on, we felt that it was really important to have the involvement of all industry segments in this development, and that includes the growers, the packers, the shippers, because without their involvement, you really don't get an understanding of the risk.

We agree with the assessments of, probably, where the risk has been identified, areas of water and fertilizer, manure management.

We are in agreement that those areas are important, but again, we all want to make sure that they we are addressing an actual risk, and a risk

that can be mitigated and something can be done.

2.4

We heard from our friends in the citrus area, you know, you look at the water projects.

You look at water, you can't make an individual grower responsible for the water supply that's delivered to them by the government.

We feel that common sense has to be applied to risk assessment in each of these areas.

One of the other areas that we think is really important is that any GPs or GAPs that are implemented have to really have three things.

They have to be simple. They have to be understandable and they have to be measurable.

If you can't do those things, then how can we expect someone to follow them?

There are a lot of ways that we can segment the industry, and we need to be clear as to what we're looking for when we're looking at risk assessment.

We've heard about, you know, commodity-specific regulation. We need to be sure that, when we're identifying a commodity, that it is a commodity that truly presents a risk, and that that can be demonstrated by sound scientific principles.

We understand, too, that there are differences that can come into play because of

different commodities and the way they are processed.

2.3

Certain commodities come into deliberate contact with water at late stages, as was mentioned in the -- by Dr. Gardine, and those products have different risks associated with them than ones that are maintained dry throughout their process.

We also want to make sure that, when we are describing a commodity or describing a product, that we're clear on what we're talking about.

And one of the words that kind of sends chills down my spine is -- every time I hear the word -- "lettuce" associated with E. coli and other things like that.

Most of the incidents, that we really know of, that have E. coli associations are truly spring mix products, which are not representative of the huge iceberg-romaine lettuce industry that is represented in this valley.

And we want to make sure that regulations that are put forth for lettuce truly represent lettuce.

I think that that's part of the thing, that we don't overreact and over-respond, based on misinterpretation of terms.

There is a lot of variety and practices within the domestic agricultural industry across

commodities and across growing areas.

2.3

The same is also true for imported produce. I know this isn't the imported or the international area, but as Dole, I feel I have to say a little something about imported produce as well.

You know, we need to make sure that any recommendations are based on what is an actual risk, whether it's imported or domestic products.

I guess that's just our main message, is that we wanted to make sure that the food is safe, but we want to make sure that we are putting our focus on areas which are going to give us the biggest bang for the buck, because it would be really foolish of us to spend a lot of time and money on products and areas that really don't present a risk, and then miss the real key risk areas.

We want to make sure that any regulation or any guidance is not so proscriptive that it causes unnecessary cost, loss of quality or availability of a given product. And we just want to make sure that it's remembered, at all times, that increases in consumption of fruit and vegetable is still highly recommended by all the nutritionists and that the public should even be consuming more fruits and vegetables than they are right now.

With that, I would just like to say I

think, you know, we've had a great working relationship with the California regulatory community when we worked on the IFPA-WGA guidelines.

Bob Stovicek was going to be here to talk, but he is not here, and I worked on that committee and I think there are a number of people in this room that contributed to those guidelines, and I think that is a demonstration of a really good way to get some things out and to get information out to the public, and to the actual people who can make an influence and affect this.

So on that note; I'd like to turn the program over to Donna Gerren from Boskovich Farms.

MS. GERREN: Good afternoon. I'm not really sure I can add too much to what all the other speakers have commented on. We all have concerns of how fast this process is moving, and not having the research to possibly back up some of the recommendations.

So I'll reemphasize that, to be on the record. But like I said, I think that, again, this should just slow down until the appropriate field research can be done and evaluated to determine if certain questions have been asked and answered in this process.

When doing the research, possibly

scientists may want to address some issues that I have, with being a grower with Boskovich Farms, that you know, the irrigation, water issue, the manure; those things affect growers.

2.3

And certain things that I think maybe they should address is, like, what pathogens should we test for, you know, when we're testing, that they want us to test for?

How often shall we test, and actually what do we do with this information once we do, you know, go to these labs and test for these types of organisms?

And in the case of irrigation water, the terminology of using "potable water" as a source of irrigation water, or at least knowing your source of irrigation water, and in many aspects, "potable" means it's drinkable. That's the definition of "potable water."

And many sources of your irrigation water will not be considered potable by many water quality experts because of the fact that they are high in contaminated contents. But that has nothing to do with the microbial risk involved in spraying your crops, so certain issues need to add doctors during research as well.

An issue such as transportation, educating

your employees on sanitation and hygiene, I think some direction with FDA and USDA should be directed towards educating these groups, helping us with training programs that will go over certain cultural differences that I know is -- as development of field sanitation, in my program, I've had to overcome things such as, "Well, you know, we don't really want to wash our hands because it could promote arthritis."

2.5

I know that seems kind of strange but, that's something that I've had to overcome and, you know, just basically educate our employees.

No, this probably will not happen, but you also have to appease them somewhat and try to find alternatives to the traditional hand washing sink, such as using sanitizers that do not use water, just to make them more at ease.

Those types of things need to be thought about when developing programs and helping us train our employees, and also, training our buyers, our purchasing agents, the concern for good safety of what we're doing, and to buy from people who are thinking about issues of food safety and trying to do all they can already.

And educating the consumer. There was mention, too, developing programs to educating

consumers. We can do all we can, you know, to reduce the risk of microbial contamination, and then it somehow fail at the end of the point-of-sale.

So certain issues like that, as well as transportation. I know when we're inspecting our trucks, you know, that come in. We have concerns with back-hauling.

1.1

Of course we don't say that we shouldn't do back-hauling because that saves companies money, but there are concerns of transporting fresh produce, after they've just transported chickens, or any type of raw product.

Certain research to that may be necessary to address those types of issues that we have.

Again, I think, you know, California and the growers and processors and shippers are all doing what they can to promote food safety, and we do back the efforts that USDA and FDA are doing in promoting good agricultural practices and manufacturing practices, but I think we should slow down and address some of these issues and realize that we do have the safest food supply in the world.

MR. GARDINE: Donna, may I ask a few questions, and I would ask Dr. Vanderveen and Joyce to comment further.

You brought up a number of really good

points, and I think we may want to get into discussion about them.

1.3

You mentioned the research needs about what to test for in water? I believe there is a recommendation in the guidance that -- while we don't give a number, we suggest that, since we are worried about people becoming ill through fecal contamination, an overall account of E. coli might be the best way to go, rather than looking for specific pathogens, but do you really want us to go out with numbers which then can become contractual obligations for you?

MS. GERREN: No. But some type of -- but E. coli that's an indication of fetal contamination, but generally that's an indicator of recent contamination. So that brings up the point of how often do we test?

Do we continue to test every two weeks, every month, every three months, every six months? What is possible?

MR. GARDINE: You know, we give some very broad suggestions in the guidance document about how often to test. A lot depends on your water supply, et cetera, what your source of water is.

But I just want to stress, and perhaps other people can comment on it, if we start giving

more detailed numbers, is that really what the industry would want to work with?

And perhaps you --

MS. GERREN: No, I don't think that's, you know, what we want. We don't want specifics, but --however, we do think that there should be some research in -- basically in seeing, is E. coli, you know, truly what we should be testing for?

Cyclospora is not a situation where it causes -- they think it might have been the irrigation water with the Guatemalan raspberries, but they're not sure because, you know, you can't -- Cyclospora as a research is just not there to identify that.

So, you know, we can't really go into your testing lab and say, "Okay, we want to test for Cyclospora."

We can't do that. That's the kind of concerns I have about, you know, the -- the source of whatever, and, yes, I realize that this document is more of an examination of our processes and our practices, and it does, you know, make us examine what we're doing, but I think there needs to be some more empirical data out there, and field research, you know, specific field research, not just from academia -- I'm from academia recently, so I know the

test-tube method is how you start out, but I think you should continue that and expand, and do more practical research before guidance can be actually given.

MR. GARDINE: Thank you very much.

MS. GERREN: Thank you. I'd like to introduce Rene Forbes, another grower.

MS. FORBES: Thank you for holding this meeting. I hope and trust that you all will listen to what is said here today.

My name is Rene Forbes, and I am a farmer in West Fresno County, California. I'm here to speak just for myself, and not for anyone or group that I may belong to. I'm unhappy with the public's emotional fear of the safety of food growing in America.

As a farmer, I do everything I can to ensure the safety of food grown within my sphere of influence. I am proud of the ability of the American farmer to supply safe and nutritious food to our consumers, and will work with you in our development of voluntary guidelines for good practices versus regulations in our industry.

Remember that, for any guidelines to be functional and effective, they must be practical and economical. The best farm practices are developed by

processors and producers, not regulatory agencies. am worried that the government recommendations will soon become mandatory guidelines or prescriptive

I suggest the following:

requirements.

One, that USDA be the designated lead agency in these guidelines to food safety. It will result in less conflict and misunderstanding due to USDA's better understanding of agriculture.

Two, that the guidelines you develop be administered through the State Department of Agriculture who are familiar with their State's production and marketing variations with Federal --variations versus Federal bureaucracy.

I think you have heard here today a couple of the people from the State and USDA, and I think you all understand what I mean by that.

Number 3, the guidelines should be as short, simple and as general as possible, and again, voluntary.

We have here the California Department of Food and Agriculture Worker Safety Regulations, General Industry Safety Regulations, SB 198, Hazard Communication.

Many California code of regulations to keep our industry safely producing safe, healthy food as

much as possible, and more than covers field sanitation, et cetera. No, commodity-specific quidance is also not necessary.

2.4

No Hazard Analysis and Critical Control

Point program is necessary. It would be another
unjust burden put on our food-producing industry when
is the above-mentioned system is working well in
California. I do not need another regulatory
program.

Four, all guidelines should be based on sound science and reasonable knowledge facts, based upon actual risk, as you've heard earlier today.

I may repeat a lot of what has already been said.

The lead agencies should work with the Federal and State Game Wildlife Agencies to allow farmers to remove or distract unwanted animals from fields. Animals are not allowed into a crop before harvest, but it is a problem sometimes with unwanted wildlife. The Endangered Species Act inhibits growers from any intervening with animals on your crop.

Number 6, manure and urban sewage sludge is being handled and applied safely, accurately and effectively in California by conventional farmers.

Personally, I use manure and do so in a very safe

manner.

2.4

On this time frame of composting, as a farmer, when we use manure, you must have it decomposed for a certain time because we have seeds in it. When an animal eats their grasses and things like that, their food supply has seeds in it, and as a farmer, you do not take raw sewage -- I mean, raw manure and put it on your field because then you are going to have a lot of weed problems.

So what you do is, you let it decompose for a long period of time and then you put it on your field, and you don't put it on the day or week before you are going to harvest that crop.

In my area, I've never seen any of those things done. So I believe that it's being done in a very safe manner.

I also believe that urban sewage is highly regulated in use and testing on the farm. I don't think any raw or municipal sewage is allowed on a food crop in California.

As far as I know, any that is used is used on a non-food crop like cotton, and there is a couple of years before you can plant back to any food-producing crop that would be edible.

I may be wrong, but I believe that we have great people around here with USDA who can answer

that specifically.

Number 7, my irrigation system is drip, so I use as little and controlled water as possible. It goes through filters and a system routinely flushed with chlorine to prevent microbiological contamination of the drip system.

My source of water is Westland Water

District, and the water is tested randomly in

different locations throughout the district. I am

kept informed on the state of my water supply

monthly. My water source is open and I have good

quality. I am unable to use ground water on my farm.

I've heard earlier about well water. People think

that's the best.

Well, well water in my area will kill all the plants, because the salt in it is so high and it's so deep that, if you could afford to go and pump the water, then you couldn't afford to use it because your ground will become uninhabitable for any plant life, so you would not raise any crops.

So we have to buy our water from the government, and it travels many miles in open canals, but it is good water and we have evidence of it.

It's been good. We have no negative microbiological contaminants in it in our history.

So I feel good that my water source is open

-- I already said that.

I feel that the source, testing, control and use of water is safe in growing my crops, so irrigation guidelines are not really necessary.

What I need is better media communication between the USDA and FDA and other government agencies, so that fear is not fed to the public due to lack of science-based government response to media hysteria.

In the initiative the President asks for better communication. We need a better network for detecting disease and outbreaks to enhance communication about these outbreaks to the appropriate agencies.

You spoke here earlier today giving examples of things like that, so I'm looking towards the Center of Disease Control that should provide resources to States to increase their response capabilities so that more accurate information is given to the media, which is then distributed to the public, so we can try to eliminate these big crop disasters that have happened for crops that have not even been poisonous or defective to the public, and yet the public no longer buys them as a result.

I encourage implementation and improvement of irradiation and more development of safe food

processes. Something that has been discussed and it's not in here, but I'm going to bring it up, is I believe that the recall authority should remain voluntary on the private side, not a government power.

I feel that it's been said earlier about how growers and processors and people -- market our agricultural products. They do it because -- for a lot of reasons, but mainly you have to be -- it's safe.

If you are going to be selling, like the beef, the hamburgers were supposed to be tainted with E. coli. The government did not have to step in and ask for it to be recalled.

At no incidence that I can recall -- I may be wrong, but that I can recall, has the government had to go in and force a processor or marketer to recall a product, because you are in business to provide good product, and if you have bad product out there, you want it pulled as soon as possible.

So I do not want to see another government involvement. I think that private industry is responsible enough to take care of it themselves.

I do not think haste is necessary in developing these guidelines.

I agree with President Clinton when he said

our food safety system is the strongest in the world, but I believe, if it isn't broke, don't be in a rush to fix it.

You appear to be listening and learning from these hearings, but I am concerned that these -- this committee's draft will be overruled by someone else who has a different agenda, and the guidelines will not be practical and user-friendly.

If the President doesn't feel agriculture is doing enough in producing safe food, then I wish he would allocate more money for enforcement of regulations already established, versus creating new ones. Use the carrots versus hammers, such as penalties and prosecution to achieve good goals.

I'd like to close with just a little short story, because I want you to all understand that farmers are concerned about food safety, and I am specifically, personally, because I travel and I've been to China, and I've been where I go into a room and go to the bathroom.

It goes through a slit in the floor. Then walk down one flight of stairs, and outside, see a young man with a shovel, taking what had just fell out of the hole in the floor, and putting it in the back of a cart that is attached to a burro and that burro walk to a field that's not far from the house,

and shovel it onto produce that's not far from harvest.

I personally have seen this. I have personally walked along the street and bought fruits and vegetables off of the street in China and eaten it. I had a blood test done before I took this trip to China and I have AB RH-negative blood. I was a donor.

Two weeks before I left, I donated blood.

Two weeks after I returned from China and had a test again, my blood was contaminated with Hepatitis. I was fortunate. I did not come down with the Hepatitis in the symptoms, but I am no longer a blood donor. That is from eating unsafe food in China.

Now, in America, I can go to lunch like I did today, and eat fruits and vegetables. I can walk on the street and buy and feel very safe. I have total confidence and belief in our food supply safety in America, and I wish more people did so, too.

DR. ZAWEL: I'll introduce myself. I'm Stacey Zawel with the United Fresh Fruit and Vegetable Association.

What I'd like to do, actually, before I even begin making comments, is address the question, Tom, that you asked of Donna, and I actually -- I'm concerned about any misinterpretation, and I want to

take the opportunity to just emphasize what Donna said, and that is that, we're not looking for more numbers, and the reason we're not looking for more numbers is because we know that what we need is research.

And so we certainly encourage any research to be developed to indicate what is the indicator organism that should be used and what is the level of that indicator organism might be for a microbiological contamination might be that would suggest a public health risk.

(Whereupon, the stenograph machine of the Court Reporter having experienced an electronic failure, and a brief recess was taken between 2:15 and 2:19 p.m.)

DR. ZAWEL: Okay. I'm going to get rolling here. Again, I'm Stacey Zawel with the United Fresh Fruit and Vegetable Association.

For those of you who don't know, I know some of you are our members, but for those of you who aren't familiar with United, we represent growers, packers, shippers, wholesalers, brokers, as well as processors and industry suppliers throughout the United States and abroad.

I wanted to again start where -- actually where I started previously, and that is to emphasize

the issue about numbers and just, does the industry really want numbers?

No, we don't want numbers. Only if they are based on science, and at this point, we do not have the appropriate numbers to -- we don't have the appropriate science to dictate what those numbers should be or meaningful indicator levels, or what that indicator level might be for microbiological contamination that would have a public health risk. Therefore, at this point, I would say that we should have research.

I have been given the job of clean-up, and I guess this is somewhat appropriate, especially since I have had both what I call the opportunity and the challenge to go to all of the previous meetings, and will also be in Oregon.

So what I want to do is provide a summary of all of the meetings, and basically, it's probably extremely repetitious of what's gone on today, and I think we have gotten some have very beneficial input from this region, and it certainly will minimize the comments in the other regions.

But for the benefit of the record, and for all of you, I do want to summarize some of the comments from the other meetings, as well as this one.

However, keep in mind that this is not all-inclusive of everything that was said.

The one thing before I do begin, I believe I have 12 points that I would like to make, but overriding all that is the emphasis that the industry is very concerned about continuing along to assure the safety of our products.

I will begin with Number 1.

That is, we urge you to slow down the process. You've heard that over and over today. We heard it at other meetings. The current pace threatens to marginalize the produce industry's participation. It ignores the complexity of our industry, and disregards scientific uncertainty behind microbiological food safety issues.

A second recommendation is that you go to the administration, you communicate the challenges that you have -- that have been communicated to you and that, hopefully, are very obvious to you, in the course of having these meetings, and request that this process slow down, saying in fact that you do not want to sacrifice doing it right for doing it fast.

And certainly, in this, we encourage you to make -- to continue to have more visits throughout the country. Additional grass-roots meetings and

field tours are an absolute necessity, especially the field-tour activity, not only additional meetings in California. Certainly we need an additional meeting in Texas in a more opportune area to increase grower input into that region, and other areas as well.

And I think that, throughout the meetings in all of these different regions throughout the United States, you have gotten multiple offers to facilitate that for you.

We also continue to urge you not to spend your energy on developing commodity-specific documents, and in fact, we have been involved with 20 other produce organizations in the development of an industry-wide guidance, and in this industry-wide guidance, it states a very important intention, and I also recognize and United was also involved in the IFPA-WGA effort, and I know the intention of that document is to do the same, and that is to serve as a catalyst for efforts across the produce industry to develop, refine and implement measures to enhance assurances of food safety.

So by saying that we don't want commodity-specific guidance does not mean that the industry does not want to do anything, but there are tremendous efforts around the country right now, pursuing that, and that's where it belongs.

It is unclear to me how development of commodity-specific guidance is going to add value. Instead, what will add value and what will provide for effective public health measures is to spend your resources in a well-thought-out outreach and education program, and that focuses on educating the industry in appropriate areas.

The fifth point I'd like to make is that any guidance that is developed must refer to any State, regional and local regulations currently in place governing water use, governing manure and bile salts and governing wildlife.

At every single region that we went to, there was emphasis that there are strict regulations on water use. Some people recommend in certain regions to increase the use of manure, to use bio-solids and very interestingly, and it was repeated today, and there are great restrictions on the ability for any one grower to restrict the wildlife.

In New York, for instance, they cannot keep deer out of their fields. It is not allowed by the wildlife people who oversee wildlife in that region. And in Florida, there was an interesting story where a citrus grower had a bear and her cubs in his field.

He was forbidden to do anything about it,

especially since the bear had cubs. So he's got to live with that and you certainly hope it's not eating the crop.

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The sixth point is something that is very important and was brought up, and that is, to make sure to put the sanitizers and disinfectants and other technologies on a fast track for approval.

And, in fact, this is right in line with what the National Advisory Committee on microbiological criteria for foods, recommended about a month ago, and that is that the committee recommends that FDA, USDA and EPA should review their approval processes for technologies being developed that address public health concerns associated with fresh produce and measures to permit rapid approvals for new technologies, and that new uses of existing technologies should be identified and implemented.

My seventh point has to do with positive lot identification. This is a very easy thing, from a regulations' standpoint to request of the industry.

To request specific pieces of information, get it put in place at the grower-shipper level.

However, at that point, you lose complete control, and that information must be maintained throughout this process.

So, rather than dealing with this issue on

a segment-by-segment basis, meaning from the grower-packer-shipper, up through transportation, up through terminal markets, up through retail and restaurants, what I recommend -- the industry is already doing this, for one, and we're working proactively with our industry partners to address this issue, and certainly, I recommend that that remain in that area.

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However, if you continue to be compelled to do so, we encourage you to follow that model, to work with all of us together. That is the only way that we are going to address the challenges of an overall trace-back system to help, not only the epidemiologist in this very challenging area, but also to help the industry.

My eight point is, monitoring worker health is very, very difficult challenge, not only from an industry standpoint, but also from the standpoint of those who represent those workers.

It was stated many times by -- in many of the different areas, for instance, by Extension agencies, the industry and the UFW, that privacy rights are very, very important, and the workers are going to be afraid to tell you if they're ill, and certainly, all they've got to do is tell you once that they have got diarrhea, and you send them home,

they are never going to tell you again. So it's a very, very difficult issue to deal with.

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My ninth point is that we appreciate very much that FDA is developing guidance and not regulation.

As a matter of fact, at the first meeting in Michigan, the FDA representative from Chicago said, "Well, we have too many rules already that we don't enforce; why should we make another one?"

So I -- I liked that comment so -- and I think it is a case of a new paradigm. We have a lot of -- we have a good model to shoot for, and I think that we are moving in that direction.

However, something that was brought up, over and over again, was that this will become, de facto, regulation, and it's going to be very easy to misinterpret some of the intentions that are in here, and I think that there have been many demonstrations throughout these meetings as to what those are.

I hope those are clear to you and I do hope that the industry provides in writing some of those specific things, and I know United will, on behalf of the industry, but recognize that that is going to happen and that provides a basis for a lot of the reaction to some of the content.

My tenth point is science, science,

science. We have to base recommendations on science.

Issuing any guidance that suggests impractical
recommendations that are hot based on sound science

or reasonable information will be counterproductive and ineffective.

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And in fact, the National Advisory

Committee again recommended a month ago, in their

list of recommendations, the following:

That many GAPs exist in our understanding of produce as a vehicle for food-borne disease, as well as intervention strategies to prevent, eliminate or reduce pathogens that are present, if they are present.

And therefore the committee recommends that research be initiated as soon as practically possible on many of the issues, and they did make -- have a list of some of their recommendations.

My eleventh point is that, as this initiative moves forward, and contemplates a means to effect standards in countries importing to the U.S. market, it must be done so in a manner that is consistent with free-trade principles, and I hope that you did get a tremendous amount of feedback on the international meeting on Monday.

And my twelfth, and last point, is one that

we have heard over and over. We continue to stress, and I know public health officials feel very strongly about this as well, and that is, throughout all of our discussions, whether it's industry, government, consumers, and -- anybody that is involved through discussions, documents, interviews, regarding microbiological food safety risks associated with the consumption of fresh fruit and vegetables, we must continue to clearly state the importance of increasing knowledge of the consumer, because we are at a time when processed food consumption is on the rise, along with the rise in chronic diseases, such as cancer and heart disease.

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An overwhelming number of scientific studies indicate the consumption of fresh fruit and vegetables, anywhere from five to ten servings a day, can decrease one's risk of many of these diseases, and therefore none of us can jeopardize the public's health, but instead encourage increased consumption of fresh fruits and vegetables, and as Nancy said, "We're on our way there, but we've got a long way to go," and so we all need to provide that message continually in all of our discussions, and make sure that this guidance does not impact that wrongly.

With that, I will end and invite you to ask any questions of anybody up here.

Thanks.

2.5

MR. GARDINE: I do believe, before we go forward to open it up to general questions, there is a point I must repeat what was said this morning.

The President's initiative is, "Food safety from farm to table."

Many of the speakers here raise the concern on the part of industry, on the part of the grower community, that you are being fingered as the culprits, and the vast majority of governmental resources are going to fall on you as the only way to limit illnesses associated with fresh fruits and vegetables in the microbiological area.

One, we do agree with you, that there a large part of the problem is in handling after it leaves the farm.

That is why the President's overall initiative and the work of FDA and USDA includes a large component for consumer outreach, includes a large component for retail education, in terms of our retail food code improvements and that increased outreach.

We do understand that. We understand that very, very well. I wanted to make that clear to everybody.

It is just that, rather than waste another

hour of this day with government people getting up in front of you and telling you about our stop-bac education program for consumers, and -- what is it-- "Fight-bac" -- excuse me, our retail food code and what we've been doing for years with the retail industry.

That was not the intent of this meeting. Programs working with your trade organizations and through the State agencies, we can get the words -- find a way, and we'll have to think about that, to get the word to you as growers that we are doing this.

It is a vast effort on our part, and certainly we see what we're doing here as only one part. If we are going to make progress in this area, to maintain the already good record of safety, of safety of produce in the United States, that it is a holistic approach from farm to table.

Unfortunately, you are the farm. So that is one part of it, and that is basically one point I wanted to make, and the other point that I would ask you to think about, and I'm sure many of you will comment on this, is, we are hearing a great deal here about what California growers are doing, and it's impressive, and it's substantial, and I believe, as we said before, we borrowed heavily from it.

We want to work with you more on it, but, does the guidance document that we've put together -- is it doable, is it practical? Is it workable? Does it have a real effect? Because this is a big country -- while you might think California is most of it, there are other parts of this country, and, once again, more and more of our produce is coming from foreign suppliers.

We have no reason to believe that their product is any less safe, that their produce is any less safe, but perhaps this guidance, if it is based on the best current science, which is good science -- if it is doable and practical, is this advice that perhaps you might be, in California, a step ahead of us.

You might feel that you are, but is this something that has utility as a base point around the country, and for us to work with our trading partners on with, so please speak about that as you are giving general comments.

California, as much as you might think differently, is not the world. Thank you.

MR. VANDERVEEN: First, I'd like to thank you very much for your presentations. It's been very helpful. A couple of things that I think that I should try to bring you up to date on.

Testing was mentioned a couple of times, and I'm sure you understand this, but just to make sure that I didn't misunderstand you, there is no way that we're ever going to assure the food safety -- the safety of produce by testing.

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Our chances of finding organisms in any commodity and protect the public health on the basis of testing is -- we're talking about, you know -- if we were to do 90-percent tests, it might start having some effect, but otherwise, it's a hopeless cause.

Microorganisms don't distribute themselves uniformly in all pieces of produce, and so, as a consequence, it -- it's a problem that just isn't going to happen.

If you don't believe it, just look at our trace-backs in the juice problem that we had. We were able to find the exact organism that caused the problem, and in only one of how many thousands of samples we analyzed?

It is clearly not a way in which you are going to -- so we are not going to -- we can't give guidance on how to test for these organisms. I'm not suggesting that testing shouldn't be part of a QA program.

I am suggesting that we can't rely on it to make sure the food supply is safe.

The next item is transportation, and I agree with you entirely, that you -- you are at the mercy of the transportation industry. And what I want to talk about there is the fact that we are determined, and we have had meetings with the transportation industry and carried your message previously, that they have to do something about this issue.

Now, the history of that is difficult. The Congress, including the Vice President, when he was in the Senate, gave the authority for dealing with issue of food safety and transportation to the Department of Transportation.

Unfortunately, they do not have the resources, nor the interest in dealing with that, and the foods -- what is it called -- Sanitation

Transportation Act of 1990, has -- they did put out a proposal but that was the end of it. They don't have anyone working on it at the present time.

Recently, the administration suggested that authority be transferred to the Department of Agriculture and to the Food and Drug Administration for respective areas.

We have looked at our authority and feel, under the Public Health Service Act, we might be able to put out a very simple regulation to help you in

that regard, and that regulation would do just the following:

It would say to anyone who is going to be a transporter of -- offer their services for transportation, that they must tell what was their last three cargo hauls, if you will, in their vehicle, train, truck, whatever, and how did they clean the vehicle after those transportation.

We feel that that type of simple regulation, and then they would have to tell the shipper what that truck was used for, or what that truck or vehicle was used for after the last three opportunities, and leave it up to the shipper to decide whether it was adequate for them to send their goods.

If you think that's a reasonable approach, we would like support in that when the time comes, and we -- but we are looking at the transportation issue.

Unfortunately, we don't have the authority to do all we'd like to do in that general area. We may get it some day.

I think we heard you loud and clear about "Slow down," but I would just have one comment.

If you look at our record and how well we have kept to our time lines, you wouldn't be terribly

nervous, and we apologize for that, but you know there is always another crisis that takes people off of a project like this and puts them on the project -- the crisis of the day, and although -- let's look at it from the other standpoint, one never gets anything done if they don't try to put, and build in, time lines.

I'm sure you'll have plenty of time to deal with this, and I'm sure there will be some stretch-out, but that's my opinion and not the official agency policy.

MR. NELSON: She wants me to read something. I have to put my glasses back on. She's got me. We do have a web site. It's fightback.org.

No, they know that.

2.5

MR. McINERNY: Not everything is preceded by www.

MR. NELSON: Mine is. We'd like all your feedback now, so here is your chance to ask questions and put your feedback into the document, and so --

MR. WINNER: My name is Don Winner (phonetic), and we are a -- we are a fresh juice processor.

We don't grow it, but we do a lot of fresh fruit and vegetables. So I'd like to thank you for

the opportunity to air our comments. I think the forum is really good.

One of the things, I guess a key factor for us, being a fresh processor is the -- we really look at how the fruit is handled, and also how it's grown, and I think that's a real key factor for us, you know, because we are pulling in a lot of fruit, and we don't know how it's been handled. And I think the -- with our business, it's real critical. It's real critical to have sound good fruit and vegetables.

Most fresh processors either have implemented or are in the process of implementing a comprehensive food safety program, and as a processor, we at least advocate the idea of HACCP process because we currently have one in use right now, along with our GMPs, and sanitation procedures, which we have on a regular basis. They are monitored from the outside, a third party.

So, I think what you need, about the HACCP part of it is, that it tends to be unique toward our operation, and what's critical to our operation on a day-to-day basis, and yet some of it has to do with transportation, in monitoring temperatures and things like that, that goes into our vehicles.

So -- and another key factor that was brought up earlier is the -- for our -- as a fresh

processor, the trace-back of produce from the processor to the field.

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We get a lot of product that we use in our manufacturing that we have lot numbers where we can trace it. We have some vineyards that will supply us with that information, but a vast majority of the product, we have no idea where they come from. We usually get a packing house or a ship location. So we don't know where the produce comes from, or the fruit or vegetables.

MR. GARDINE: Before you go on, can you demand that?

MR. WINNER: We have done that, in the past, and there are a lot of vineyards I've turned down because of the quality of the fruit. I've had to reject some fruit -- so, yeah, that does -- we can demand it, but economics sometimes put us in an awfully tight situation --

MR. GARDINE: I do understand that.

MR. WINNER: -- because we are a company with a bottom line.

MR. GARDINE: But it's something that you can work with your suppliers to encourage to the extent possible when you have options.

MR. WINNER: Right. As a person in the middle between the grower and the public, we really

feel that it's important to know where that produce comes from. And you know, a lot of our customers, big customers, ask us, you know, "What kind of processors do you have? Where does it come from?"

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In some instances, we don't know.

And I think we know that the produce industry takes it real seriously, the responsibility it has in minimizing the potential of microbiological hazards in growing and packing shipping products.

I think food safety should be, and I think everyone agrees, safety is the Number 1 concern, and I feel that the HACCP or trace-back program would help ensure the safety of products and also products to the consumer, whether they are fresh produce or packaged goods, and result in repeat business and also improve profitability, because I think what we have found is the better quality of product we have.

Obviously, we're in more of a premium business where we can -- we can probably charge a little bit more, but that's the idea behind when you look at some of our customers, what they demand.

You know, they are really looking for high quality products, when it comes to fresh juices, and -- but I just wanted to get that across for the record there.

MR. NELSON: Thank you.

DR. TENZER: I would like to --

2.4

MR. GARDINE: Please identify yourself.

MR. TENZER: My name is Abe Tenzer, and I am from Bonagra Technologies and Services.

Our company has been working very hard for the past seven years to increase the efficacy of chlorine as a sanitizer because we all know and realize that many of the people that use chlorine in our industry don't really understand what they are testing for, don't even know how to spell my hydrochloric acid, and therefore don't understand what they get in the way of sanitation.

Seven years ago, we developed this process, went to toxicity tests, and followed the recommendation of CFR 173.315.

And today, I am very, very happy to report to you that, after completing seven years of studies and spending close to two million dollars, we have developed a very, very unique system for sanitation, which relies, Number 1, on the chlorine potentiator, which is our potentiator to align the chlorine to act in the pH range between 6 and 10 rather than six and 7 and a half.

We have developed a computerized monitoring and injection system, that follows the hydrochloric acid's concentration by the use of a proprietary ORP

sensor, and the most important thing, we are helping our clients to safeguard their future interests, both from a professional point of view and legally.

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Every batch that goes through our system is marked and every batch is being evaluated by the machine by our computerized system, every 12 seconds, and we have records of pH, temperature, ORP.

In addition to that, we have also arranged for samples to be taken every week of each one of the commodities that are coming into the packing house and are being washed in our system, to verify the efficacy in terms of standard plate counts, in terms of E. coli -- and in terms of E. Coli 0157:H7.

We have also initiated a program on full commodities, apples -- actually, five. Apples, baby carrots, green peppers, tomatoes and citrus to help out with the situation that the gentleman, the juice man, mentioned before, and we know what goes into our production line, and more importantly, we know what goes out from our production line.

And the fact is that we are capable of reducing E. Coli 0157:H7 as well as pathogen to the extent of over five lots.

This technology is available, and I'll be very, very, happy to give my cards to the other people here in the room, or wherever they are.

Our web cite is www.bonagra.com, and the fact is that, in most of the industries, they have a killing stage, a killing phase, and therefore they are, quote, unquote, "secure."

Even though they still have botulism in the canning industry, and many other places, but for the first time we have now a killing phase for fresh produce at temperatures up to 100 degrees Fahrenheit, tested and proven over the past seven years, and continuously being challenged and tested by our clients.

Thank you.

MS. DODGE: Would it be possible for me to come up there and put my papers on the podium?

MR. NELSON: Yes.

MS. DODGE: My name is Elaine Dodge and I'm the Executive Director of STOP, Safe Tables Our Priority. STOP is a consumer-advocacy organization made up of primarily victims and their friends and family -- victims of food-borne illness.

We were founded in 1993 after the Jack-In-The-Box out-break and since that time, our membership has grown to include victims of E. coli from juice and from produce and Salmonella from produce, and Hepatitis A victims from the frozen strawberry outbreak.

And I appreciate being able to come up here and be able to speak to you all, and I have to confess that it's intimidating because I'm used to addressing folks in Washington, D.C. where I'm not the only consumer representative in the room, and when I come to these State meetings, it's scary because I realize I'm the only one with this point of view in the room.

And I wanted to thank you in particular to invite me to speak up, and in fact to debate with people here today, and I wanted to remind you all -- all of you in FDA that those of us in the consumer community need an invitation to an event to be able to be here, to be able to debate, and we often don't get included in the invitation or included in the line-up of speakers.

And I would also make a suggestion for the future that, if you have a format where you have a round table, rather than this sort of back-and-forth addressing system. It becomes more of a dialogue, rather than sort of a recitation of a -- of points.

The first comment that I wanted to make is that, as I read the guidance document, I'm concerned about the ultimate effectiveness of it because, as a guidance document, and as it being a document, and I as a lawyer know that recommendations don't have the

force and effect of law like regulations do.

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I also, having worked in food safety for the last eight or nine years, know that, as many people today have exemplified, that most of the folks in the industry are conscientious people who put out a clean and safe product.

But there are people in the industry that don't operate that way, and that's who the regulations are targeted for, and unless you have 100-percent compliance with the kinds of recommendations that are in this guidance and with regulations, then you have a food safety net that has holes in it, and that's how people get injured.

My second observation and concern about the guidance document is that it's not clear what the goal is. From my point of view, the goal should be taking steps that are designed to eliminate microbiological contamination of product, and STOP, in all the safe food organizations, that I am aware of, recognize that it's impossible to produce a sterile raw product.

So we understand that raw meat and poultry has a possibility of being contaminated -- raw produce, raw juice, raw everything, that there is the potential for contamination.

But I think there is an important distinction in how you identify -- it's important how you identify the goal, because it's going to have an impact on whether or not you reach it.

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So if the goal, as I read it in this document, is to reduce microbial contamination, then you are not going to get as close to the goal, if the goal is to eliminate microbial contamination, and by that I don't mean -- well, I would like the goal to be eliminate microbiological contamination in the end product, but it's very important that the steps that you take along the way are aimed at ending microbial contamination.

So in other words, when you are addressing the issue of water, the goal is to have no microbial contamination in the water or pathogenic microbial contamination in the water, and the goal of manure should be not any microbial contamination, so that when you apply those products to your produce, there is a -- it further reduces the likelihood of those products being contaminated.

Another observation I made about this guidance document that concerns me is the use of the word "may" versus the word "should."

As I see this document, the recommendations seem benign, and to take relatively modest and mild

recommendations and further weaken them by saying, "Producers and growers may do this," it almost eviscerates or makes it -- neutralizes it of having any kind of effectiveness.

So I would recommend substituting the word "may" for "should."

Then I would like to address this point about consumer education. We are a consumer education organization. We believe in consumer education. We were instrumental in persuading the U.S. Department of Agriculture to change their consumer education message about cooking temperatures for ground beef from brown in the middle, which was an incorrect message, to a time temperature recommendation.

I'm looking for guidance from all of you -no pun intended -- for what you want me to tell my
members, what you want me to tell consumers about
your products.

Believe it or not, I've been told that we should -- our Odwalla apple juice victims should have known that that juice was a raw product, and we should have taken it home and boiled it before we served it to our children, and I can buy your tomatoes and recommend to our members that you buy your tomatoes and make spaghetti, but what do I tell

people about lettuce and alfalfa sprouts, and what do I tell people about frozen strawberries?

2.2

And just for the sake of debate, to respond to a couple of points that other people have made, we're big believers in science, and I think that -- I agree with many of the statements that have been made today about the lack of scientific basis for some of these recommendations.

Where it stands out in particular is in the sections under water and the sections under manure, and our recommendation would be that -- and we've been through this with raw meat and poultry -- that you test water for the presence of generic E. coli so that -- so you see whether or not you have fecal contamination in the water.

It's not to give you information as to the safety of your product in the end, but it gives you information about your process, about the safety of the water that you are using for a variety of purposes.

But generic -- but there is a big debate, and I don't know if you all are aware of this, within the meat and poultry community as to the utility of generic E. coli information, and those of us in the consumer community advocate pathogen-specific testing, because that's -- even though it's -- the

beef folks are proud to tell me that cooked feces isn't going to hurt me.

Even raw feces with no pathogens isn't going to hurt me. I don't want to eat cooked feces, and I don't want to eat irradiated feces, and I don't want to eat your product with feces on it, and I certainly don't want -- none -- nobody -- and neither do you -- wants anyone to get sick from a pathogenic -- a product contaminated with pathogens.

And the same is true with manure. There is a very difficult -- when I asked you to give me an example of what you meant by community and cultural differences, in terms of agricultural treatments, and you used the example of manure, that's a very -- that's an issue that concerns me.

When there is science that shows and it's reflected in your document, that E. coli 0157:H7 can last up to 70 days in steer manure and a year in sheep manure, and then there's folks on the East Coast who have a growing season of less than 40 days.

It doesn't seem to me that the conclusion is, Well, Jeez, consumers who eat the product that's grown out of untreated manure in less than 40 days in the East Coast have to take their chances, as opposed to people who can -- I mean, I suppose that's one approach, but along the lines of consumer education,

if that's the approach you want to take, then I think it's incumbent upon the growers in the industry to provide consumers with information so that they can evaluate the level of risk and take those chances themselves, but it's not for you all or the government to have that information and consumers to have to literally live or die by the decisions and the information that you all have.

Recall. There is currently recall legislation before Congress for USDA, and the reason why consumers have been so concerned about recall for so many years is not because any meat and poultry processor or slaughterer hasn't eventually recalled their product.

It's the number of days between the time that a product has been identified as contaminated and that negotiations continue between government and industry, and industry decides that they will voluntarily recall their product.

And in those days, product is distributed at the retail level. It's purchased, it's taken home, it's put in the freezer, it's cooked and people get sick. So it's about timing, not about compliance.

And I guess one last comment I'd like to make is about irradiation, which you know is a very

debatable topic in all of these forum.

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Irradiation is not a silver bullet, and within our organization, we're constantly wrestling with irradiation, "Yes" or "No."

One of the things to keep in mind about irradiation is that it doesn't kill 00 cysts, and it doesn't destroy the sugar toxins, and --

MR. GARDINE: Hepatitis A.

MS. DODGE: -- and Hepatitis A.

A VOICE: How about B and C?

A VOICE: And the new E variety?

MS. DODGE: Well, so. . .

Thank you very much.

MR. GARDINE: I just want to add a few things here, because I do not want our representative here from the consumer group to think she is the only consumer advocate in the room.

I think most of us from FDA, USDA, the State agencies and local agencies and the trade, I believe -- believe they are consumer advocates here. I do want to thank you for reminding me that I did want to say something about recalls, and you did say it for me.

While it might appear that recalls always get done voluntarily, frequently for someone who has been there, the time that we think a recall is

necessary, and the time that, on occasion, a processor might agree that the recall is necessary, does on occasion, in my personal opinion, put the consumer at risk.

And so recall authority is something that I certainly think appropriate or for regulatory agencies to have. That is nothing to do with why we are here but I thought I'd put that on the record, and I do want to point out, the one concern you indicated that it appeared to you perhaps that the regulation didn't seem to be going anywhere, didn't have an end point.

I when we say we all agree, you cannot have a sterile world, but we do say reduce microbiological hazards to the extent possible, and what we are trying to point out there is, within the limit of science and what we know, and what is doable, you should reduce, to the extent you can, microbiological hazards associated with produce, and I personally thank you for your comments, and we did try to get the word out to consumer groups and I, like you, are somewhat concerned that, at some of the earlier meetings, consumer groups appeared to be under-reached, and I don't know why.

MRS. TENZER: My name is Gail Tenzer, and I am from Bonagra Technologies. I would like to

address Elaine.

It's interesting, first of all, that she brought out the thing about regulation, and what the end will be, and that it isn't forceful enough in California.

In California, we practically don't have to worry about it. The market does. This is the most litigious State in the country, and one of the things I am constantly telling growers is that, if they take action against a bug in the field, that they can see, with a pesticide, and spend the thousands of dollars that they do, the way they do, if they were totally devastated by this insect that they can see, the worst thing that could probably happen to them would be that they would lose that season and a lot of money.

However, that little invisible bug, in this country, and particularly in this State, probably would destroy the company altogether. They would probably never recover from the class action suits, and being an attorney, I'm sure you understand.

Now, as far as everything else is concerned, we in the industry are extremely conscious of the problem because all of us are consumers, too.

My husband is an --

A VOICE: Immune compromised?

MRS. TENZER: -- immune compromised. I have an 85-year-old father who cannot afford to get an infection, at this point, because it would kill him.

I think many of us have either children or somebody like that, and we're all aware of the fact that the tomato that we are handling today we probably will end up consuming, because it will come back in the form of a salsa, or we're going to buy it at the local super market and prepare it in a salad, or something.

The problem that we are experiencing right now is one that is -- has not been that new to the meat and poultry industry.

However, fruits and vegetables are new vehicles of transmission for these particular bacteria and microorganisms, because fruits and vegetables were always considered to be high acid and therefore safe.

The pathogens did not normally survive at a pH of 4. Now they are surviving at a pH of 2, and under refrigeration.

So we are confronted with, all of a sudden, trying to scramble very, very quickly with attempting to do research in areas that we hadn't done before to deal with a problem that concerns all of us very,

very much also.

Not just as industry members, not just because we would like to preserve our businesses, but also because we're very, very concerned about preserving the lives of all of our dear ones.

So we can't forget that we're consumers also and I wanted to lay your fears at rest, as far as how this industry is responding.

I have talked to many, many people that I know. There are many, many people who are concerned.

Very often you'll hear that this grower or that grower, his wife has breast cancer or something, and they are extremely concerned not to get any infection because of the medication that they are taking.

So I don't think that any of us that are working in this industry ever forgets that we're also buying everything that we are working with.

What you could take back to the consumers is that, Number 1, all we can really talk about is risk minimization, at this point, first of all, because we were all caught by surprise.

Nobody expected microbes that usually would only be found in animals to be found, all of a sudden, on tomatoes or melons or anything of the sort.

It never happened before, and it has started happening in the last -- oh, decade or so, mostly -- and most of the outbreaks in fruits and vegetables have just been very, very recent. So much so that many people can't believe that this can be happening, and they are getting hit with this.

It takes a long time to put everything in place that is absolutely necessary to attack this problem.

You can help us, I suppose, because the people who work for us are also people who we have to depend on to cooperate with us, as far as washing their hands, as far as using the bathrooms, the port-a-potties and all of that.

So it takes consumer education.

Another thing is that consumers in this country, unlike consumers in other countries, always assumed that the produce that they bought was absolutely clean.

I grew up in Brazil, and I've lived in Mexico and in Venezuela. People there have been dealing with amoebas and the like for a long time, and it never ever dawned on anybody, who ever had any kind of education at all, to just stick their produce under water.

Everybody knew to go ahead and get some

chlorine. They used to have them in pill form, and they used to soak their vegetables for 20 minutes before they would serve them to their family.

Here, I had a problem with my mother. I said, "Ma, you have to put your vegetables in water with some ice and a little bit of vinegar and lemon and take a little tablet of clorox."

She goes, "Bleach? Oh, my God."

Well, in fact, when we have an earthquake here or something, we're always told to treat our water with chlorine.

We really need to, at this point, make a joint effort, all of us, and the people who are consumers who are also workers, whether in a restaurant, in a hospital, in a field or whatever, have to realize that they, too, contribute to outbreaks, or they also contribute to keeping our food supply safe.

We have to do this all together, or -- it's really a joint effort.

Thank you.

MR. NELSON: Next question. Anybody in the back?

MS. BRISSON: I just feel compelled to let people know that there were at least three representatives of the Senior Nutrition Community in

Northern California at this meeting. I'm kind of one of the last ones left, because I live here in Salinas.

My name is Elsa Brisson, and I'm with the Monterey County of Social Services, and I oversee the Area Agency on Aging for this County.

I have turned in written testimony, on a couple of the issues, and I would like to share that -- what spurs me, from Elaine, was, I still think that, when I go back to work with the clients, both in the food stamp program as well as in the senior nutrition program, I need up-to-date, quick, short information, not 29 pages, on how -- what to tell consumers about value-added products.

In the senior community, people are not cooking. What I see in my packet about the "Fight-bac" program is excellent. It's excellent for me as a mother of young children to take home to my home and use because I cook. A lot of my clients do not. They live in hotels. They also do not cook. They get cooked food out of the pantries and other

What I need to know -- I was on a tour at a Knob Hill Grocery Store, and I was telling them they should rinse added-value vegetables, and the salad is already in the bowl, and we just zip all the bags

places and it's "open the bag and pour it out."

open and eat it.

Who is correct?

So those kinds of issues need to be addressed, and they need to be addressed in short form so professionals like myself can keep a handle on the big picture, because I do not have time to go through like web sites.

FDA and USDA have fabulous web sites, and I have spent many, many hours looking through the research materials, but many times I get a representative saying, "Did you hear about the strawberries?" "No."

Today I was dealing with other issues so we need to be able to be there because I feel that I am the link between to two communities.

I'm a registered dietician by profession, so I just thought I wanted to be on the record, that we need it to be simple, and we need to know what the risk is, because one of the percentages that kept coming up was three percent comes from the produce, and I really do think the most important thing senior citizens die of -- the five major things are -- heart disease and cancer -- and heart disease, we definitely know, is nutritional.

Comparing the need to lower fat, eat more fruit and vegetables, a little bit of residue on a

vegetable, the risk and benefit ratios are, you know, 1 2 blown out of proportion. 3 (The court reporter admonished the speaker 4 to slow down.) 5 MS. BRISSON: I'm sorry. 6 get excited, I talk too fast. I'm sorry. 7 Especially the senior community, they watch television, they read newspapers, and they don't 8 sometimes connect the fact that the food-borne 9 10 illness was in Michigan, or the eggs, like the chickens whose ovaries that have Salmonella are 11 actually only East Coast, not the West Coast, and so 12 they started taking all of these foods out of their 13 diets, and sometimes I sit down and go, "Well, what 14 do they eat?" 15 And sometimes what they are eating is 16 17 refined sugars. So then I also find out they are diabetics. 18 So the issue is the risk benefit, and then 19 20 to make it simple for people like me who don't really want to know the different strains of E. coli. 21 teach it, but I don't want to do it on a daily basis. 22 Thank you. 23 MR. NELSON: Next? 24 MR. HENDERSON: Hi. My name is Peter 25

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Henderson.

I'm with Sprout House. I'm a grower,

packer, shipper of sprouts. We do mostly clover radish and onion. We're in the -- probably the large grower in Northern California, and Elaine, I hear your fears, and I've been doing it for 20 years, and I started out with a VW bus, doing swimming pools, and have progressed to a company with 30 employees.

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We have a full HACCP program. We have -- are not using the Bonair (phonetic), but we use a Pulse Instrument for sanitizing wash before we package our product.

We use Silliker Labs for our constant testing of -- normally our product. We test our drains, our wash tanks and our drums.

I'm really here to kind of say I think we have a good forum. I think one of the things that comes out of all of this is change. Two years ago, I never thought sprouts could even be considered a problem.

We could have any kind of bacterial problem that could make people ill, Salmonella or E. Coli. So I'm here to ask you, the FDA, to take the time.

I think we do have the regulations, whatever, that 0157:H8 -- it's a very intense document. I think we need to work together as groups, not specifically apples or sprouts, to get an overview of each industry, because each industry has

different problems and different needs, and we have to be able to change and to regulate.

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You can't change regulations as fast as

E. Coli 0157, or whatever the new name is going to

be, or the new problem. And part of being in

business is change, from blue swimming pools, VW

buses to large refrigerated trucks, to 30 employees

from 4, to short hair to -- you know, to making, you

know, a decent living, from making nothing, living at

home with your parents.

So change is what I can only say. I grow around 20,000 pounds a week of product. After 20 years, if my product was a bad product, I wouldn't be here today.

So I think everybody wouldn't be here today if they didn't have a lot of faith in what they do and do a good job.

The real problem I kind of worry about is the people that aren't here. The people that are chopping the vegetables in the back room and throwing them in a bag and selling them.

But we will get to them and we will change and please have confidence in your sprout grower.

Thank you.

MR. NELSON: Next person. Another question?

MS. HARWOOD: I'm Janice Harwood, and I'm the Nutrition Family and Consumer Sciences Advisor with the University of California Cooperative Extension.

First of all, I wanted to reiterate what Mr. Riggs and several of the others have said this morning, about getting out in the field and really seeing what is already being done.

I had that opportunity last spring. In fact, I helped organize a tour with the cooperation of several local shippers and growers. The tour was for nutrition and health professionals, and the purpose was to educate us so that we would be able to better answer consumer questions that we get from our clients.

And it was very enlightening to everyone. I thought that I was pretty knowledgeable about some of the practices that were being used in the field, and I learned that there was considerably more being done than I thought was being done, and I find that the industry is very responsive to making sure that the food is safe because they are consumers, too.

They all take home product to eat at home, and certainly would not want to make their own families ill. So I think there is already a lot being done, and if you haven't been in -- through a

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processing plant, we are going to be doing another tour. The industry has been -- is willing to support a second tour.

I would like to invite Elaine to give me her card so that I can include her in the invitation next year, and also anyone else that would like to participate as well.

In my nutrition education program, which is targeting low income families, I implement the 5-a-day message because it does -- it's important for improved health.

The objective of the program is to help the low-income consumers be able to take advantage of the best buys in the supermarket that will provide them with the most nutrition.

This includes increasing the consumption of fruits and vegetables, and notice I said "fruits and vegetables."

We all know that the imported produce that we get at this time of year can be much more costly because it's not in season, and people are confused about what's in season any more because it used to be that there was a season.

MR. GARDINE: There was a season.

MS. HARWOOD: Right. That there was a time when grapes weren't in the stores, that peaches

weren't in the stores. And we relied on other things. We relied on canned, we relied on frozen.

And that is what I still encourage in this program.

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So, I hope that, in your recommendations or regulations or guidelines that you are providing, at the international level, will certainly be of a fairly strict nature, because it does not make sense that we continue to support the other countries and be -- have this high-priced food in the supermarket.

I also want to encourage you to use the Cooperative Extension network of home economists. We have different titles in different States, but please use us as a means of providing consumer education.

I've been doing nutrition education for longer than I want to admit, and I have been giving the same food safety message for just as long. It's a simple message.

This pamphlet that you included in our packet today is the basic message, and if people follow this, they shouldn't have any problems, and I use that booklet in my program. I just wish it was also in Spanish.

MS. McDONALD: It is.

THE WITNESS: It is? Oh, thank you, Janet.

It just never ceases to amaze me that people have not gotten the food safety message, and

put it into practice. What I think we are going to need is some additional resources to develop strategies to change the behavior of people in the home.

We know most of the food-borne illness takes place in the home. It doesn't get reported in the same way, the same extent that the large outbreaks that come in at the food service level, but it's -- it just is a message that I wonder why it hasn't been put into practice. It's one thing to educate. It's another to change behavior, and we need to figure out how we can really get people to change their behavior.

I'd also like to encourage the industry to work with Cooperative Extension, home economists or nutrition advisors to help get their message to the consumer.

We have been neglected by the industry as a means of consumer -- of communicating with your customers, and it would be most appropriate to support our programs, just as it is to support the research and extension programs of the farm advisors and the agricultural agents, as they are called in other States.

We are looking forward to working with the local growers and shippers on the tour next year and,

again, if any of you want to be invited, just let me know, and we'll make sure you get an invitation.

MR. GARDINE: Just for the record. I want to thank you for those comments, all of which were very well taken, except that I must stress your opening comment about somehow enforcing this more strictly internationally, because of our treaty obligations and because of some of the concerns you heard raised here, that whatever program we initiate domestically, we are going to have to find a parallel way to do something similar and not tougher nationally.

MS. HARWOOD: That's my personal opinion.

MR. NELSON: Okay. Next question?

DR. ZAWEL: Ray, I have a couple of comments. Actually I have questions or comments really to Elaine's concerns and statements.

One of them is the fact that you weren't invited, and there is a tremendous amount of complaint across the industry that, "We weren't invite either," and on that note, we are on the same page, and in fact it was at our own volition, we put together a panel. FDA did not come to us and put it together. So just to make that very clear in this instance.

The other issue is your desire to have a

recommendation to eliminate microorganisms rather than reduce, and I can certainly recognize that, from a consumer standpoint, and obviously I am one also, as the rest of us are in the room.

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But elimination is completely unrealistic, it's like setting a zero tolerance for listeria.

That will not engage the industry in this process, and reducing means to reduce, as the means to eliminate aren't going to be any different, but calling it elimination is just an unrealistic goal.

The third comment I wanted to make is the one that you stated about manure and the information that's in the guidance. There are a couple of quotes or statements that will hopefully in the future contain references, and that is the 70-day survival of E. Coli 0157:H8 in cow manure, and the one-year survival of the same organism, I believe, in sheep manure.

The 70-day experiment was done in a test tube, and that is the best information we have right now on 0157 and manure.

The one-year experiment was, although short, mentioned in the February National Advisory Committee meeting.

It was mentioned off-the-cuff to demonstrate the fact that we don't know what the

survival is of some of these organisms. The unfortunate part is that it made it in the guidance just on that very short mention, and I'm still skeptical of that information, and I hope that FDA has in fact got that reference in their hands, and has evaluated that reference with the same rigor that I evaluate information.

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And I would encourage you, in instances like that, as well as all of us, to do -- to get ahold of that data.

Get ahold of the study and say, you know "What does it mean? How was this experiment done and does it demonstrate that in fact this is a risk or is there further research that's needed?"

And we would certainly be more than happy to be a resource to get that information to you.

But I just -- that demonstrates by itself that we need more science to really determine what the risks are with all of these things, whether it be manure, whether it be water.

The last point that I wanted to make directly to your comments was the need for pathogen-specific targeting testing.

It's going to be -- it's not going to be -- if in fact that is advocated and that's in place, it's not going to be indicative of some of these

1 issues and you are going to miss organisms that do not have the same survival as whatever the 2 pathogen-specific testing is going to focus on. 3 So if you pick E. Coli 0157:H7, are you in fact 5 guaranteed to have eliminated Cyclospora from that 6 product? 7 And those are things we don't know, and that's why we need research to identify the 8 9 appropriate organism as an indicator.

The other question, actually, I had for Dan
-- Dan Weber was it? I can't see you.

MR. WINNER: Winner.

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DR. ZAWEL: You had stated that you encouraged HACCP and trace-back. Are you -- and I just want a clarification. I wasn't quite sure if you meant that HACCP in the whole produce environment is what you are advocating, and looking for, from your suppliers?

MR. WINNER: Yes. I think.

MR. GARDINE: Can I ask you to come to the mike, please?

MR. WINNER: I believe it should be from the field of -- (inaudible) -- the consumer has to, in my opinion -- is that you need an (inaudible) business.

In a grower or packer situation that you

need it to their environment, so it's not someone -the guidelines are there, you create them. It's just
basically the critical control points, and you can
identify them and set up measurement and monitor them
and I think that's an useful tool in our operation,
along with sanitation, and along with GAPs and -- but
not -- and I've been through packing houses, and I've
been in some fields, and you know, so it's not easy,
you know. Some of the -- but it's -- it's unique to
whatever the operation is:

DR. ZAWEL: Right, and I think that -that's what I thought. And I need to address that on
behalf of the industry position from our memberships'
standpoint, is that HACCP is an acronym.

Good agricultural practices is an acronym and good manufacturing practices is an acronym, and what is important is what you do in your food safety program and not what acronym you use to describe it, and what I mean by that is that HACCP is a science-based system, and you identify the critical control points, and what you do about those critical control points, based on science, and so while we -- the industry moves forward on these issues in a direction that is HACCP-based, under the principles that we are preventing problems, rather than testing an end point, we cannot call what we do "HACCP,"

because -- until we have the science.

And as the science is developed, some of the critical control points can be better defined and so I state that, very importantly, for the record, and for the people in this room, and for you, to make sure, instead of demanding of your -- of the people who supply to you, that you have a HACCP program, ask them instead, "What do you do to assure the safety of your products?" Get it line-by-line, and go visit them and make sure they are doing what you expect.

MR. GARDINE: I --

DR. ZAWEL: Could I add to that, for FDA, an earlier draft of this document did contain a section on HACCP. It was determined HACCP -- means Hazard Analysis Critical Control Point.

One of our concerns were the critical control points, the mechanisms for controlling them, currently, are not there. And it -- it would be very difficult to call this a HACCP program.

So that section was purposely taken out, for that very reason --

MS. DODGE: I'd like to respond to what.

DR. ZAWEL: -- because I think this is a -- it's kind of a unique opportunity, at the beginning of these discussions, when all of the aspirations and points are fuzzy, and where we can find common ground

for agreement, because I predict that six, eight, twelve months from now, when we get down into those devilish details, there will be a lot of disagreement. FDA, like, we don't have it now.

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MS. DODGE: We will get tougher. Consumers are also big advocates for science, and in the same way that you don't want to burden industry with unnecessary requirements that may not make food any cleaner or safer, you don't want to create a false sense of security in consumer's minds that a product is safe because the government has told industry to do it a certain way, when the government really had no basis to tell industry to do it that way.

So we want there to be a scientific basis for testing water, what you're testing for in the water, and I do see that it has to be product-specific.

In other words, it's incumbent upon the government to identify, "These are the products that are likely to be contaminated with these pathogens," and then you test for those pathogens in those products, unlike the system that they have set up now for beef and poultry, where they are testing everything for Salmonella, as an indication for process control, where Salmonella isn't necessarily the pathogen that you would worry about in some of

the products that it's being tested for, and I certainly wouldn't want to see FDA make the same mistake that USDA had made.

Another comment I would like to make is something I forgot to make when he was up there is, also, the importance of testing in this recommendation for washing, where the recommendation is that you have progressively cleaner water for washing produce the closer it gets to the --

Where it gets into the hands of consumers, that's only a worthwhile recommendation if you have studies that show that contamination in the first washing -- that you might get in the first washing is going to be washed away by the final washing, and if you can't prove that, then there doesn't seem to be any -- it becomes a detriment to impose on the industry that washing requirement and make consumers think that somehow now their product is more safe because it's been washed with clean water at the end.

DR. ZAWEL: No.

MR. NELSON: Any other questions?

MS. TENZER: Again, I would like to --

MR. NELSON: Name, please?

MS. TENZER: My name is Gail Tenzer,

Bonagra Technologies. Again, I would like to address

26 | some of Elaine's concerns.

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As far as the washing is concerned, we are washing and disinfecting and sanitizing, as much as we can, those commodities that lend themselves to washing. There are some commodities, such as mushrooms -- well, maybe not mushrooms, but grapes, strawberries, that do not lend themselves to being washed in a packing house, and actually are only washed at the point of consumption.

Now, those definitely need to be washed by whoever is going to be serving them, Number 1.

In the second place, and as I told you before, we as a society don't have everything in place to assure that, after we've done an excellent job of sanitizing the product, unless it's packaged, that it hasn't been recontaminated, say, in a truck that was used for the transportation, or that it hasn't been somehow recontaminated at the supermarket, or in the food service establishment or whatever.

So in the interest of safety and caution, if you are at all in doubt, it probably -- or if you have an immune-system compromised person, it's probably a very, very good idea to go ahead and do it again, although it's not necessary to do that with the packaged products.

They probably know what they are doing and

have done more studies and everything in that direction, and I believe that those products are generally washed very well, and are safe.

Now, also when we're talking about processors who are receiving products that they themselves do not grow, but they are going to process them, because, again, there is always the potential of a product getting recontaminated, say, in transport, et cetera.

If you are going to be turning your product into juice or into a salad or anything else, then in order to avoid any kinds of problems, I would definitely resanitize the fruit before I process them and I think that -- as a processor, we have to do that anyway.

Then it's not as important what source you got it from. You have a better opportunity than does the guy who has bulk produce that is sending them out all over the place, selling them. He may sell some to foods services that are going to process it.

He may sell some to a supermarket, where somebody from a church or something is going to come and buy a whole batch of something and turn it into just juice, and a whole bunch of people might get ill because the people who turned it into juice are not a professional, such as you, and did not know how to

handle that fruit, and the fruit was appropriately washed and sanitized.

So I -- that's why I can't stress enough that everybody all along the food chain needs to be educated. This is a joint effort. I don't believe we should be pointing fingers at each other.

I don't think that we should use any of these things as a competitive kind of thing between imports or whatever, because, in fact, we've had outbreaks in this country from locally-grown produce, as there should have been from imported produce.

I have seen some impeccable plants on the other side of the border that it would probably be very, very difficult to find even here.

The other thing that I wanted to stress is that the -- boy, I've forgotten.

I know, if it was important, it will come back to me, and I'll just raise my hand again.

MR. NELSON: One comment to everyone.

There is an address in your packet, and if you think of a comment you want to put in writing, write it down, mail it to us in Washington, the address is there. Please send it to us. It's not too late.

MR. GARDINE: And the docket number --

MR. NELSON: And the docket number. All the information is there. Yes, sir?

MR. BROWN: Louie Brown with the California Farm Bureau Federation. I think if any fingers need to be pointed, it does need to be point at the industry in California to recognize the apparent needs that we do indeed have the safest food in the world, which we do claim to have, but there is also more work that we need to do, and I think that is a statement that Nancy overlooked here, and that California farmers are some of the most progressive in the worlds.

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We are already held to some of the highest regulations and standards in the world, and do produce safe food, which has been proven by science to be nutritious and healthy. So I think a hand does need to go out to the California producer for the job that they do.

Another point I agree with is the inability and the ineffectiveness to get the information out about meetings such as this, and that it's very difficult for anyone outside of the beltway to find out that there is a meeting coming to your back door, or even within your State.

That leads me to my question on how does the FDA propose to disseminate this information, once it is in final form, to growers so that they can have the guidelines that you are proposing and then

possibly use those?

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MR. GARDINE: Well, we've been working on a lot of things since October 2nd. Clearly, one of the things we're going to have to do with the help of USDA, and in the USDA, we think it will be a bit easier because we do have a very good Extension Service that is designed to work with growers, and share information.

We do have trade organizations if they agree with what guidance might be there. We do have State and local agencies to work through. We don't have -- you are asking now for a detail that we don't have, but, essentially, we think in the U.S. we have the mechanism, what might be a better, more challenging way is figuring out how to do it with our trading partners, and that is going to be one of the challenges facing us this year.

MS. FORBES: I have a question. I want to respond on one thing that you guys are talking about right now.

I'm Rene Forbes. I'm a farmer. I'm also a consumer. I love to eat, and I am concerned about our food supply and government rules, recommendations, suggestions.

So I am not a member of anybody up here. I got my information because I was a concerned

consumer. I went through the internet. I have friends who know I'm concerned.

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So I network, I ask questions, and when I found out that there was a meeting, I called Mary Acton, who was the Director of putting this meeting on for FDA, but I am just another person, just like any of you out there in the audience. I went out and called her. She had a phone number, I got it off the internet.

I became aware of where the meeting was held. I asked her -- I told her I was going to be here and told her that I wanted to talk, and she put my name down and she came up to me, and I introduced myself to her, I signed in, and these people are very nice people, and they told me what my number was when I would talk. But that is how I became a speaker up here.

I was not invited. You do not have to be invited. All you have to be is a concerned citizen who has something to say, that you want other people to hear it, and that's what these hearings are about and if you every really concerned, you will be out there beating the bushes so that you can get the information to be at meetings like this, because I'm not in any of these organizations.

I did it just because I'm concerned about

what does go on. I've been in the farming business for 24 years, and I feel everyone should be knowledgeable about what's going on and that's how I'm here. Thank you.

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MR. NELSON: Any other questions? Yes, sir?

MR. PEREZ: My name is Antonio Perez and I'm with the Agricultural Committee in Watsonville, and all I want to say is that farm workers have families, also, and they don't want their families to get sick.

They won't want to get sick themselves, so they try to do the job as best as they can.

And just in case, I think that the training program for farm workers would be a good idea, and especially if they can be done in Spanish, since at least in this area, most of the farm workers are Hispanics and any information that comes out in English is very difficult for them to understand.

So if we are to get a message out to them and for them to put in practice, then it has to be in a language where they can understand. So that's all I really wanted to recommend.

Thank you.

MR. NELSON: Any other questions?

MS. TENZER: All right. My name is Gail

Tenzer, and I did remember what I forgot to comment.

2.5

A number of years ago, at the United Fresh Fruit and Vegetable Association seminar in Yuma, we were taken over to the other side of the border to a Mexican-Japanese venture that was a processing plant, and it was extremely, extremely clean. It was probably cleaner than most of our hospitals.

Now, let us all remember the Japanese culture of being almost paranoid about infections and microbes, et cetera.

Now, when we saw all of this, I remember some people commenting that U.S. consumers will not pay what it costs to do that kind of a job.

It's a question of what our priorities are, too, and our market also demands that our food be competitive in price. We are one of the best-fed nations in the world, as far as that is concerned, and we do probably pay less for our food than many other countries do.

The Japanese were used to having to pay \$10 for a grapefruit. And in fact, they buy our globe grapes, which are seeded, which are large, and they will take that wine grape, which is \$1.00, and they will peel it and cut it up into little pieces and eat it with toothpicks because fresh fruits and vegetables are extremely expensive.

We can do a lot, but he also have to keep in mind or bear in mind who is going to pay for it and how much is it going to cost, and is the consumer willing to pay that much, because, in this country, produce is sold on a basis of supply and demand, whereas some of the companies who are exporting to other countries, they will -- for example, Japan, will make certain demands on the grower and say, I want it this way, but I am going to pay you so much and so much a box, which is way above what we're paying here.

And that was what I had to say.

MR. GARDINE: I have just been told that the address to send comments to get it into the docket is not available in your packages.

The address is: Dockets Management Branch, HFA-305 in parentheses.

A VOICE: How fast do you think we write?

MR. GARDINE: Okay. Documents,

D-O-C-K-E-T-S, Management Branch. Then, in

parentheses, their internal mailing symbol, which is

HFA, as in Harry, Frank, Arthur, dash 305, Food and

Drug Administration, Room 1-23.

The street is 12420 Parklawn Drive. I'll repeat that again. 12420 Parklawn Drive, in Rockville, R-O-C-K-V-I-L-L-E, Maryland, 20857.

With the announcement -- the Federal
Register announcement not in your package, neither
you nor I have the docket number to reference on top
of the document. I'm hoping someone will have that.

5 But if not --

2.6

MR. McDONALD: I have it.

MR. GARDINE: Would you, please?

MR. McDONALD: It's Docket Number 97N, as in Nancy, dash 0451. Docket Number 96N-0451.

MR. NELSON: Does anybody in the back have a question? No questions in the back? Okay. Up here in the front.

Dr. Tenzer?

DR. TENZER: I would like to ask the members of the FDA, in connection with the fresh juice opinions and comments were solicited by the FDA last -- about two, three-month ago, what happens to all the comments, because we never got any information about a decision, or something like that.

Usually it's very helpful to talk with somebody that talks back. It's very, very important also to get the feedback because, with all due respect, to solve the food industry problems, we have to establish certain microbial reference numbers, and I don't see it coming from here now, and if the industry solicited, that's fine, but industry

deserves to be answered.

2.5

MR. GARDINE: I will, since I had nothing to do with that project, graciously defer to Dr. Vanderveen, if he wants to handle it.

MR. VANDERVEEN: I assume you are talking about the guidance that we put out in the end of August, and --

DR. TENZER: Yes.

MR. VANDERVEEN: Those data, along with other data that we have are being incorporated in our deliberations on our proposal for HACCP of -- for juice, and all the comments will be referenced in that Federal Register document when it's published.

We must go through it very carefully and consider each comment. We will not respond directly to each individual, but the comments will be addressed.

We probably will get a number of comments on the same subject that we will incorporate those together, and then comment on it, and it will be -- there will be a proposal for juice HACCP, and it is presently going through the process of being approved for publication, and we assume it will be approved, but it has to go through the department and OMB, and that's underway at the present time.

MR. GARDINE: John, are we talking about a

proposal or a final document?

MR. VANDERVEEN: There are two proposals that are coming on. They are both proposals at this point in time. They are -- I believe that's correct. We have not -- we have had an ANPRM, Advanced Notice of Proposed Rule Making, which goes out, and now we are going to proposal phase, and then, when we get comments, we will go to the final phase on those.

There are two documents coming out, one dealing with a labeling proposal, which will be -- will have a sunset. We are proposing a sunset revision, and then the other is -- and this was all laid out in the notice for comments -- excuse me -- for the guidance document in August. And then the other document was HACCP.

MR. BOLSTER: When do you anticipate that it will come out?

MR. VANDERVEEN: We can always be hopeful. We were hopeful it would get out before the end of the year but I'm not sure exactly when it will get there but we're hopeful soon.

DR. ZAWEL: John, where is it? Is it in OMB now?

MR. VANDERVEEN: It's my opinion that it's being considered beyond the agency, but I can't even be sure of exactly where it is at this point in time.

I don't have that precise information. MR. NELSON: Well, if there are no questions -- if you have a question, raise your hand. We are going to thank you all for coming today and all your comments and really appreciate your coming to spending the day here and hope to see you again. (Time noted: 3:57 p.m.) 

STATE OF CALIFORNIA --000--I, Eunice A. Pickthorn, do hereby certify that: I am a Certified Shorthand Reporter in the State of California, and that as such I reported in Stenotype the proceedings had in the FDA/USDA Town Meeting at the time and place therein set forth; That the same is a full, true and correct transcription of said proceedings to the best of my ability. Dated: December 17, 1997 Eunice A. Pickthorn Eunice A. Pickthorn CSR NO. 2598 

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